PAGES OF TOP TURNING KIT

NOVA Comet II lathe, Robert Sorby ProEdge Plus deluxe, CompacTool set, and more!

The No.1 magazine for aspiring designer makers

Issue 299

THE HOME OF WOODWORKING www.getwoodworking.com



FINE-TUNING ...with segmented turner Bryan Cath

WRITE ON!

Turn your own

rollerball pen

– Learn the basics with novice Andy King

WOODTURNING SPECIAL!

G

Spindle turning made easy

BACK TO BASICS

POLE-LATHING

shows you how

Gudrun Leitz

Aminste

Evolution compression pen mandrel

PLUS...

Foundation course: Michael Huntley talks timber
 Around the House: Phil Davy makes a rustic garden gate

• Make your own mini version of a traditional pole-lathe





MASTERS OF OUR TRADE



14,000 PRODUCTS IN STOCK FOR NEXT DAY DELIVERY



FIND US ON FIND 5



Welcom

Hello and welcome to our special turning issue, which features the perfect mix of tests, exciting new products and some great features for you to enjoy (or at least that's what I intended!)

I couldn't help but include above a photo of the hands of our featured pole-lathe turner at work, Gudrun Leitz, **p60**. She shares her story with us and flies the flag for women turners everywhere, showing that she's not afraid to get her hands dirty, swing the odd axe and produce a perfect spindle in less than 30 minutes. And while I'm on the topic, you can also see some wonderful pieces of sculptural turning, made by women, men and youngsters, in our centrefold gallery, which shows the top pieces from this year's AAW International Symposium, p46.

So what else can you expect from *GW*299? Well, lots! Andy King goes turning mad as he tries out the new Nova Comet II wood lathe, **p14**, as well as some other top turning kit. He also takes you step-by-step through the process of making an acrylic pen, **p32**, before reviewing a whole raft of top pen-turning kit, **p34-36**.

Edward Hopkins meets segmented turner Bryan Cath, **p41**, whose pieces will leave you scratching your head in wonder, and we also have the last of Michael Huntley's 'Woodwork Foundations' series, **p51**, where he discusses timber.

And if you're inspired by Gudrun Leitz, then why not learn how to make your very own mini pole-lathe, **p56**? In 'Around the House' Phil Davy makes a rustic garden gate, **p71**, and if you're in the market for a spider-proof shed, you're in luck!

Les Thorne goes back to basics this month and talks spindle turning, **p79**, so if you need a bit of a refresher, now's the perfect time! Enjoy!



Tegan Foley, Editor



Editor



Andy King



Tegan Foley Technical Editor Consultant Editor Consultant Editor We endeavour to ensure all techniques shown in Good Woodworking are safe, but take no responsibility for readers' actions. Take care when woodworking and always use guards, goggles, masks, hold-down devices and ear protection, and above all, plenty of common sense. Do remember to enjoy yourself, though.



Dave Roberts

Phil Davy

recycle When you have finished with this magazine please recycle it.

Paper supplied from wood grown in forests managed in a sustainable way



Published by MyTimeMedia Ltd Enterprise Way, Edenbridge, Kent TN8 6HF

SUBSCRIPTIONS

UK New, Renewals & Enquiries Tel: 0844 243 9023 Email: help@tww.secureorder.co.uk USA & CANADA - New, Renewals & Enquiries Tel: (001) 866 647 9191 **REST OF WORLD** -New, Renewals & Enquiries Tel: +44 1604 828 748

BACK ISSUES & BINDERS

Tel: 0844 848 8822 From outside UK: +44 133 291 2894 (International)

Email: customer.services@myhobbystore.com

EDITORIAL Editor: Tegan Foley Technical Editor: Andy King Consultant Editors: Phil Davy, Dave Roberts

CONTRIBUTORS Andy King, Edward Hopkins, Michael Huntley, Alan Turner, Barrie Scott, Phil Davy, Les Thorne

PRODUCTION

Designer: Malcolm Parker Retouching Manager: Brian Vickers Ad Production: Robin Gray

ADVERTISING Business Development Manager: David Holden

Email: david.holden@mytimemedia.com Tel: 01689 869 867

SUBSCRIPTIONS Subscriptions Manager: Kate Hall Subscriptions: Sarah Pradhan Tel: +44(0)1858 438 798

> MANAGEMENT Publisher: Julie Miller

Group Advertising Manager: Rhona Bolger Email: rhona.bolger@mytimemedia.com Tel: 01689 869 891 Chief Executive: Owen Davies Chairman: Peter Harkness

Tel: 08444 122 262 From outside UK: +44 (0)1689 869 896

www.getwoodworking.com



timemedia

print & digital modia publishers

© MyTimeMedia Ltd. 2015 All rights reserved ISSN 0967-0009 The Publicher's withen consent must be obtained before any part of this publication may be reproduced in any form whetsnewer, including photocopiers, and information retrieval systems. All reasonable care is taken in the preparation of the magazine contents, but the publichers cannot be held legally responsible for errors, including loss resulting from negligence of our staff. Pelaince placed upon the contents of this magazine is at reader's own risk. Good Woodworking, ISSN 0967-0009, is published monthly with an additional issue in January by MYTIMEMEDIAL Ld, Enterprise Way, Edenbridge, Kent TN8 8HF, LV. The US annual subscription price is S508PP (equivalent to approximately 98USD). Artireight and mailing in the USA by agent named Wordnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA, Periodicals postage paid at Jamaica NY 11431. US Postsmaster: Send address changes to Good Woodwrking, Worldnet Shubscription records are maintained at CDS GLOBAL LL, Tower House, Sovereign Park, Market Harborough, Leicester, LE16 9EF. All rights reserved ISSN 0967-0009



Contact us

Editorial 01689 869 848 Email tegan.foley@mytimemedia.com Post Good Woodworking, Enterprise Way, Edenbridge, Kent TN8 6HF See the panel on the right for a full list of magazine contacts





On the cover 14 & 26 **Dust off** your turning smock Andy King tests a

variety of turning kit, revisits some past projects and shows you how to turn a pen, step-by-step!

60

79

56

In pole position

Barrie Scott visits Queen of the Woods Gudrun Leitz who is pretty handy with a pole-lathe. In fact, she can turn a perfect spindle in less than 30 minutes!

Spindle turning refresher

Les Thorne turns teacher this month as he goes back to basics and covers the various spindle turning tools in detail, and most importantly, shows you how to get the best from them



Projects

Make your own mini pole-lathe

Alan Turner shows how to build a small version of the traditional pole-lathe that can even be used in a city garden

Techniques

Back in the turning seat

Andy King finds himself critiquing some past projects, getting to grips with acrylic and looking at some top pen-turning kit

Timber – a very complex subject!

51 Michael Huntley goes back to the beginning and introduces the vast subject of timber

Getting back to (spindle) basics

New to turning or need a bit of a recap in terms of spindle turning tools and their uses? Fear not if so, as Les Thorne shows you how

People & places

Fine-tuning

Edward Hopkins meets Bryan Cath, a segmented turner with a complex and mathematical mind

Centrefold

46

26

79

41

60

We look at the 10 deservedly-awarded turned pieces from the 2015 AAW International Symposium

Oueen of the Woods

Barrie Scott ventures into the historic Clissett Wood to meet pole-lathe turner Gudrun Leitz

Your favourites

News	8
Courses	12
Letters & makers	66
Around the House	71
Next month	89
Michael's Musings	90

Woodworking

Andy King tests... Nova Comet II wood lathe Treatex Hardwax Oil CompacTool turning set Easy Wood turning tools **Robert Sorby ProEdge Plus** deluxe sharpening system **Axminster Evolution** compression pen mandrel Axminster Deluxe pen assembly press

Universal Pen Barrel Trimmer

ZAP Z-Poxy Adhesive

Subscribe to

Good Woodworking for a FREE **Bosch jigsaw blades** set plus a 7-piece holesaw set







Garden gate Build this low-cost rustic gate with Phil Davy

34 34

35

35

14

17

18

19

20

71



CELEBRATES ITS

WITH A

Cuprinol

000

ON SALE

TH

DECEMBER SHED OF THE YEAR COMPETITION SPECIAL!

17 pages of 2015 Shed of the Year category winners

PLUS: an exclusive interview with founder Andrew Wilcox

THE AMERICAN DREAD We showcase the TOP DOAW Excellence Auvard WINDERS 45



5 STARS What a mandrel! Essential pen-turning kit from Axminster



Mathematical precisionBryan Cath shows ushis mind-boggling pieces



Choosing timber
 Michael Huntley
 explores this vast subject 51

Real Bosch!

P





Up to

cash back

Download the **FREE** Bosch Toolbox App via Google Play Store or iTunes App Store



Create a simple profile



When prompted by the App, **take a photo** of your receipt and email it via the App



Bosch will transfer the cash back directly to your account!

Paid directly to you

THE SIMPLY OF THE SIMPLY OF THE SIMPLY OF THE OWNID AT A COMULT AT

Offer only available via the App; terms & conditions apply - see these on-line at www.bosch-professional.co.uk/bonusbangbonanz

Cash back offers on Bosch Professional Power Tools. Available October – December 2015



Bosch Professional Power Tools are available from reputable dealers throughout the UK. See website for more details on the products included in this offer and the entire power tools and accessories range.



www.bosch-professional.co.uk

Voodworking

Comment, insight, views and news of woodworkers from around the globe

rom the

Magma lathes

Two new lathes are now available from Classic Hand Tools: the Magma 175-FU and 200-FU models. Made in Austria, Magma has been manufacturing lathes for nearly 30 years and its newly expanded range includes smaller, more budget friendly versions, which is great news for turners everywhere!

The 175-FU weighs in at 45kg and includes drive and live centres, faceplate and a 150mm toolrest. The distance between centres is





420mm and the spindle thread is M33. It features a No.2 Morse taper, a 24-step indexer, a 1hp motor and forward/ reverse drive. Priced at £725, this lathe is more suited to the amateur who takes their turning seriously.

The 200-FU, on the other hand, is something else entirely – a serious piece of kit! This heavy-duty wood lathe has a 200mm centre height, a 400mm

swing over bed, and the distance between centres is 110mm. Weighing in at a hefty 198kg, it has a cast-iron headstock, tailstock and bed, No.2 Morse taper, 36-position indexing, a M33 spindle thread and a swivelling and sliding headstock. It benefits from a 2hp motor, electronic variable-speed from 0-3,600rpm, a moveable control unit, two-step Poly-V pulley drive and a 15mm headstock hollow spindle. Also included is a drive centre, live centre, 150mm faceplate, toolrest and a double cone for perfect alignment. All this could be yours for £1,895 – to find out more about these lathes, see www.classichandtools.com.

New woodturning chucks and jaws from Record Power

This exclusive new range has been developed using Record Power's extensive experience and knowledge of woodturning in conjunction with a group of highly experienced professional and hobby turners, to bring you the ultimate in quality, versatility and value.

SC3 and SC4 chucks

The SC3 geared scroll chuck and SC4 professional geared scroll chuck are direct replacements to the previous G3 and Supernova2 models, with some notable improvements.

Both new chucks feature noticeably larger jaw slides and are made from high tensile steel, impregnated with nickel-copper. The Super Geared True-Lock[™] technology ensures excellent strength and unsurpassed surface and dimensional accuracies to give vibration-free operation.

The SC3 chuck is available in $\frac{3}{10}$ n × 16tpi; 1in × 8tpi and M33 × 3.5. The SC4 professional geared scroll chuck is available as an insert version, with a



full range of inserts to fit. It is now available with an M33 × 3.5 insert and the chuck body has been designed specifically to hold this large thread size insert, therefore offering even more flexibility to customers who may want to upgrade to or from an M33 lathe. Prices start from £119.99 for the SC3 chuck.

Chuck jaw range

The new range consists of a comprehensive range of 14 intelligently

designed sets of chuck jaws, offering woodturners a definitive collection of jaws to cover virtually any woodturning task. In addition, all are fully compatible with previous Nova series chucks.

Record Power is also offering you the chance to own the full range of 14 sets of jaws in their latest prize draw – simply go to www.record power. co.uk/competitions and enter the code 'JAWS15' to be in with a chance of winning. The lucky winner will be announced on 30 November 2015.



NEW

WELDTEC

#18STBED

0

USTSU

ATB , Pos 21°

184MM

চয়ান্ত্র

. Tested for durability on the most demanding a

25% STRONGER*

0

IRWIN WELDTEC™ CONSTRUCTION BLADE WITH WELDED CARBIDE TEETH 0

R

0

News

Gearshift pen sets

Brand new from Turners Retreat is this range of Gearshift pen kits, which would make an ideal gift for any car enthusiast. The mechanism design is based on a five-speed H pattern shifter and can be shifted just like the real thing! The cap features a car tyre with a true to life tread and hubcap; the tip features the same tyre tread as the cap. The shifter handle includes an etched five-speed pattern and the industrialised crowbar clip attached to the body with two small screws rounds out the design. Easy to make with a single tube. Refill fully advances at the front of the shifter and fully retracts at the back of the shifter. The pen uses a popular Parker-style refill.

Other kits available include 'Antique Pewter' and 'Antique Brass'. Prices start from £16.99 – see www.turners-retreat.co.uk for more info.

Ten Turners Turning – 2016



See Colwin Way in action at this much anticipated event

Following the success of Axminster's prestigious Ten Turners Turning event at Nuneaton in March last year, the company plan to hold a second event in March 2016.

During this two-day event, a range of professional turners will demonstrate their skills and styles of woodturning, explaining many useful tips, techniques and easier ways of achieving the desired result and produce their own trademark turned pieces. Both Friday and Saturday afternoons will see the pros competing against each other and against the clock in the 'Ready Steady Turn competition'.

The line-up for this event includes a host of well-known names in the industry and there will also be a wide range of Jet and Axminster lathes on display for you to see.

The dates for your diaries are Friday 11 and Saturday 12 March 2016 from 10am-4pm at Axminster Tools & Machinery, Bermuda Trade Park, Nuneaton CV10 7RA. Although this is a free event, you are advised to turn up early to avoid disappointment. See www.axminster.co.uk/stores/ nuneaton to find out more.

M42 premium turning tools

Available from The ToolPost is this fantastic range of M42 premium turning tools from Carter & Son Toolworks, which has recently been updated to include some brand new skew chisels, parting tools and scrapers. These tools are renowned for their superior sharpness and edgeholding ability and feature aircraft grade aluminium handles for superb balance and feel, and in terms of durability, these tools have come to represent the epitome of woodturning tool excellence.

Carter & Sons Toolworks' products have proven themselves to be ideal companions for the serious woodturning enthusiast, offering superb holding of an edge that can be brought to a sharpness unrivalled in HSS tools, combined with innovative design, giving excellent handling and ease of use. These latest additions extend the versatility of the range further and ensure that Carter Tools will find a place on the toolrack of any turner who seeks the optimum in tool performance. Prices start from £79.20 – visit www.toolpost.co.uk to see the full range.

FireWriter – the professional pyrography tool

This clever and precise tool allows you to decorate wood, leather or other materials through the careful application of heat. Easy to use, the FireWriter features multiple heat settings and quickly rises up to 650°C. You can use the various temperatures to create different shades from very light, to a much deeper burn or heavier infills.

FireWriter is ergonomically designed for comfort over long periods with a slim handle and easy to change tips. It comes with a writing tip and five nickel chrome wires of different thicknesses, which allow you to make your own tips.

Accessories are also available including pens with different tips, packs of specialist tips and a separate splitter means you can switch between two pens quickly.

All kinds of designs are possible: with a little creativity you can achieve wood burning, acetate stencil cutting, leather crafting, heat stamping, pattern transfer, personalising items, hot knife cutting and soldering using different tips.

Antex is offering a 20% discount to GW readers. Just quote GW20P when purchasing and you can pick up this great tool for just £120, instead of the usual £149.99. To buy yours, see www.antexcraft.com.



News

Clarke woodburning stoves



As the days become shorter, the nights become longer and those chilly days start to creep back. why not beat the cold with a Clarke woodburning stove from Machine Mart – perfect for your workshop. The range includes those manufactured from durable castiron as well as those which are more compact and efficient. Many have also been approved by DEFRA for burning wood in smokeless zones and feature precise screw adjustable air control. Prices start from £298 see www.machinemart.co.uk for more info

Axminster Evolution Series Pro Drive

Available in 1MT or 2MT, the new Axminster Evolution Series Pro Drive is safe, secure and offers greater versatility and accuracy than the usual two- or four-prong drive centres. The centre features a spring-loaded, stainless steel centre point and a sharp toothed outer ring, which provides the drive. The Pro Drive is unique in that you can vary the spring tension and it offers various advantages, such as accurate repositioning and the fact that the work always goes back in the same place. It is safe to use - simply reduce the pressure from the tailstock and, in the event of a dig-in, the work will simply stop revolving. Lowering the tailstock pressure further enables you to stop the work and inspect it without switching off the lathe. Priced at £29.50 (valid until 31 December 2015) - see www.axminster.co.uk

for more info.

2015 Ultimate Tradesman

IRWIN Tools recently announced the winner of the 2015 National Tradesmen Day competition as Stacey Greenwell from Stoke-on-Trent, who impressed the expert judging panel with his dedication to the community. He was nominated for his commitment to rejuvenating what would be derelict areas of town, in order to provide homes and jobs for those in need. He was one of hundreds of nationwide nominations and beat five other finalists to be crowned the 2015 Ultimate Tradesman. As this year's winner, Stacey will drive home a brand new Ford F150 4×4 truck worth over £35,000. He commented:

"I'm so thrilled to win the competition. It feels good to know the work I do is appreciated and this award is a testament to the great team of individuals I work alongside. I never win anything and I know my family will be really proud."

To keep up-to-date with news of National Tradesmen Day 2016, visit www.irwin.co.uk.







00 0

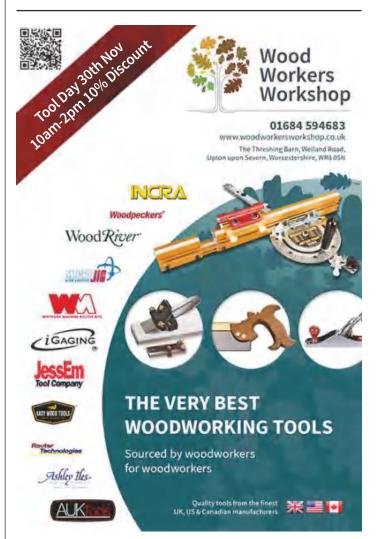
-mounted clamp

The Kreg Jig K5 combines the best features from every jig we've built before, with advanced, all-new features. Easy to set up and use, the K5 produces perfect pocket holes and creates tight joints in all types of wood.

Find your nearest stockist kregtool.eu

built-in storage for bits screws & ac





COURSEDIARY

If you're finding it a little chilly in your workshop, why not check out the great selection of courses we've put together for you this month?

November

3-8 Guitars

3–8 Renaissance and baroque viols 3–8 Traditional stringed and keyboard instruments

3-8 Violins, violas or cellos West Dean College West Dean, near Chichester West Sussex PO18 0QZ Tel: 01243 811 301 Web: www.westdean.org.uk

2-3 & 19-20 Beginners woodturning 5 Introduction to Leigh jigs * 5 & 24 Pen making (Axminster & Sittingbourne) 9 Kitchen/door jointing 10-11 Beginners routing * 12 Fine-tuning hand planes **13** Sharpening 13 Sharpening with Tormek hand tools * 19–20 Woodcarving with Paul Gardner 23-24 Machining for restoration 24 Christmas decorations & gifts (1 day) 25 & 26 Turned boxes (advanced) 26 Turning a pestle & mortar 28 Spindle moulding * 30-4 Windsor chair * Course held in Sittingbourne, Kent Axminster Tools & Machinery

Unit 10 Weycroft Avenue Axminster Devon EX13 5PH **Tel:** 08009 751 905 **Web:** www.axminster.co.uk

December

2 Green wood spoon carving 3–6 Woodcarving – a creative exploration 4–7 The apprentice's dovetailed box 17 & 18 Woodturning – make a small bowl 18–20 Woodturning – bowls with texture

West Dean College West Dean, near Chichester West Sussex PO18 0QZ **Tel:** 01243 811 301 **Web:** www.westdean.org.uk

30-4 & 28-2 Windsor chair 1 Pen making * 3 Turning pepper mills * 5 Turning a pestle & mortar * 8 Pyrography – Ben Beddows 11 Sharpening with Tormek * 12 Scrollsaw course * 16 Festool demo day * * Course held in Sittingbourne, Kent Axminster Tools & Machinery Unit 10 Weycroft Avenue Axminster Devon EX13 5PH Tel: 08009 751 905 Web: www.axminster.co.uk

New website for Robert Sorby

Woodworkers have a new and exciting resource at their disposal after Robert Sorby announced the launch of its new website. The website has been built using the latest in responsive design meaning it will be easy to use on all computer devices and Smart phones.

As well as in-depth product information on a huge array of Robert Sorby woodworking tools and accessories, the new site offers the opportunity to download product instructions, view



engaging and informative films, win fantastic prizes and gives users the chance to provide advice and opinion on its online forum.

The site also boasts an interactive flip-through digital catalogue, allowing browsers to clickthrough from links in the catalogue pages to website pages, where further info and engaging content is available at the click of a mouse. Woodworkers wanting to find a stockist can easily find directions through the website's

use of Google's Maps. And a handy link under each stockist's contact details takes the browser straight to their preferred stockist's Robert Sorby pages.

Visit the Resources menu for a range of additional exciting features including the 'Tools' and 'Techniques' pages where some of the world's best known woodturners let you into their secrets. Visitors can also see where the Robert Sorby team will be demoing tools on the 'Events' page.

Future plans include having an online review section where users can rate tools and a Robert Sorby tools users' gallery where woodworkers will be invited to send in pictures of their work and what tools they used to complete it. To see it for yourselves, visit www.robert-sorby.co.uk.

The North of England Woodworking & Power Tool Show 2015

Taking place at the end of this month (20–22 November) is the The North of England Woodworking & Power Tool Show, which is the largest and longest established retail woodworking and power tool show in the Country. If you're looking for a fun and informative day out, then the 'Harrogate' show has it all. Expect to see demonstrations from 30 leading woodturners, plus a woodworking clinic, great prizes to be won in the free raffle and more than 70 companies exhibiting their wares. Buy your tickets online to take advantage of some savings. You can also meet the Editor who will be manning the *GW* magazine stand!

The venue for this event is Harrogate's Great Yorkshire Showground – to find out more see the website: www.skpromotions.co.uk.

Kerb appeal

Your eyes are not deceiving you, this is in fact a stunning 1:1 scale wooden replica of a 1955 Mercedes Gullwing classic car, which weighs in at a hefty two tonnes and is one of only two believed to exist in the world. Furniture Clinic was called on to restore this extremely rare replica, which was painstakingly fashioned from teak.

The wooden car, which comes with front wheels that can steer, was acquired at the start of the year by car enthusiast Jeremy Harvey. It's a beautiful thing and the owner has been told that the cost of the wood alone runs into the tens of thousands and he's had an estimate for the car of around £30,000. The Gullwing is currently in a warehouse although many carpenters have admired it and have told Jeremy what an amazing piece of work it is, and we agree!



Restored by Furniture Clinic, this 1:1 scale wooden replica has to be seen to be believed!



News

OFFCUTS

Peter Sefton is holding a hand tool day at his Wood Workers Workshop, so why not visit the workshop, meet Peter and see professional demonstrations taking place. There will be loads of tools for sale alongside hand tools sourced from some of the best English toolmakers, plus benefit from expert advice on buying tools and see Peter demonstrating hand tool techniques. The event takes place on 28 November – see www.woodworkersworkshop.co.uk.

Fancy taking part in a two-day coppicing course helping to restore local woodland around the Malvern Hills and the Teme valley? The course takes place from 21–22 November and is organised by Malvern Coppicing. See www.malverncoppicing.co.uk.

Charnwood Woodworking Machinery will be appearing at a few road shows over the coming months: on 7 November they will be at Yandles & Son Ltd, and see them at Toolite's in-store show from 4–5 December.

woodworking Free Reader Ads

Machinery

Coronet lathe with 3ft bed, Henry Taylor Master chuck and woodturning chisels. Any reasonable offers considered (2) 01543 279 310 (Staffs)

Kity K5 Combination machine. Saw, planer/thicknesser, spindle moulder. Old machine in really good condition with a host of extras; £300 (**?**) 07707 242 948 (Oxon)

Makita MLT100 sawbench, on moveable trolley, little used; £150 (C) 01992 627 927 (Waltham Cross)

Poolewood lathe. Variable-speed, 1,219mm between centres, twin bed bars. 1hp reversible motor; \pounds_{325} (C) 01664 812 520 (Melton Mowbray)

Hand tools

Stanley ratchet brace, 8in swing two-jaw model in excellent condition, with a selection of auger and flat bits; £35 ⑦ 01189 712 472 (West Berkshire)

Stanley Bailey No.4 smoothing plane in excellent condition with wooden handles; £20 (© 01189 712 472 (West Berkshire)

Power tools

Bosch GOF 2000CE Professional router. Brand new with accessories, unused; £250 (© 01629 814 572 (Derbyshire)

Black & Decker sander, ½-sheet orbital finishing model, 135W, in good boxed condition with dust extraction kit; £10 (C) 01189 712 472 (West Berkshire)

Miscellaneous

15-20 pieces of hardwoods, approximately 3ft long, of various types, widths and thicknesses; make me an offer (C) **01619 762 525 (Cheshire)**

Tormek SVH-320 jig for grinding planer blades; £80 (C) 01793 771 898 (Swindon)



Brand new pine wall wine display held with two large screws; £10 (7) Matthew – 07858 728 376

Wanted

Spiers/Norris/Henley planes wanted by private collector; any quote beaten. Call Ron Lowe on (© 01530 834 581 (Leics)

Woodworking hand tools, especially old wood and metal planes, wanted by collector. Write to Mr B Jackson, 10 Ayr Close, Stamford PE9 2TS or call (© 01780 751 768 (Lincs)

Woodworking tools: planes by Norris, Spiers, Mathieson, Preston, Slater, etc., brass braces, interesting rules and spirit levels; top prices paid, auction prices beaten (© 01647 432 841 (Devon)

anten um educations at in the Deeder Ade in the fellowing establish

Book your
ad nere

Simply fill out this form, including your name and address, and post it to:

Reader Ads, Good Woodworking, Enterprise Way, Edenbridge, Kent TN8 6HF

If you don't want to cut up your magazine, you can photocopy this coupon or simply write out your ad on a sheet of paper and send it to us.

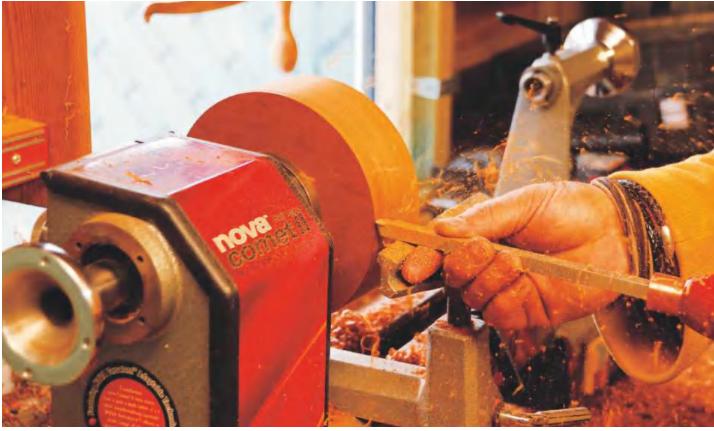
Alternatively, if your advertisement is for goods worth less than £500, you can email the details to tegan.foley@mytimemedia.com

rain a private auvertiser. Please efficer my auvertisement in the Reader Aus in the following category.				
□ Wanted or □ □ Hand tools □ Machinery	For Sale under the followin Power tools Turning	g heading Timber Miscellaneous		
	g			
My advertisement reads as follows:				
•••••				
•••••				
\Box My advertisement is for more than £500. I enclose a cheque for £10 made payable to My Time Media Ltd				
Namo				
Name				
Address				
Add1033				
Postcode 🕐				



Woodworking KIL & TOOLS New products, tools and tests

Andy King, Technical Editor andy.king@mytimemedia.com



▲ There's plenty of power for higher torque applications

Hits the spot

The Nova Comet II wood lathe is ideal for beginner turners and offers great results, but a digital readout and bigger beds would make a world of difference

'm still a fledgling woodturner, and as with other forms of woodworking, I'm continually learning; although woodturning definitely does need a lot more concentration when attempting the finer side of things, as one lapse usually results in a catch with disastrous results.

For me, a smaller lathe never seems quite as daunting, and as I'm unlikely to turn a full

set of stair parts or table legs, suits me perfectly. Having had a chance to look at the Nova Comet II from Teknatool, I found it's one that makes life that bit easier for me and should do the same for any novice or intermediate turner looking for a well-built, stable and easy to use machine. It also has the added bonus of being able to fit an extension bed, if you do want to start working on longer



The banjo secures solidly with excellent quality fittings

pieces. It also has a $\frac{3}{4}$ hp motor, which allows you to gain that bit more 'oomph' on bigger pieces, resulting in quite meaty cuts if needed, but for me its real comfort zone is the finer side of things, especially working to its 'out of the box' capacities rather than extending the beds.



▲ The lathe is put into reverse with a simple flick of a switch



The top pulley has 12 indexing positions

Solid build

So looking more closely at that solid and robust build, it has cast-iron beds, a silky smooth operating quill and easily adjustable firm holding toolrest, although here I found it a little wanting due to it only being 150mm long, which means that any longer spindletype work requires you to move the rest along a little – a longer rest would allow for an easier operation here.

The tailstock allows for easy adjustment, which means that it scores highly for me. It's well thought out with the locking lever in easy reach for quick adjustments; no reaching round the back for levers and knobs as can be the case on rival machines.

Variable-speed

But for me, the variable-speed is the real game changer. Like routing, lathe work demands similar principles so smaller work can be spun faster, whereas bigger work needs to be slowed down to work safely. On belt change machines there's always a tendency to go for a 'middle for diddle' belt setting that gives the best compromise between the two, as belt swaps can be a pain.

The variable-speed on the Comet II is operated by a dial on the right of the bed with a good range of speeds across its three



▲ The speeds around the controller dial are very hard to read!



▲ You lock the pulley wheel by pulling out and rotating this disc

settings. These three settings mean that belt swaps aren't eliminated, but you can set the machine to the work you are doing and slow it down to do the roughing and centralising work before stepping it up once it is round and true.

There's also a crossover of speeds within these settings so you can sit it in one speed ratio while still allowing a bit of leeway into another ratio if needed.



▲ Top quality fittings, such as the quill advance, are a theme throughout the lathe



▲ This lever and handle combination is used to swap the belt position



▲ A well-positioned lock makes tailstock adjustments very easy

Need for digital

The swapping of the belt is simple: the plastic front cover hinges to lift away and gives full access to the drives while a small external Bristol lever secures the tensioning lever to change the positions easily. My only gripe here is the sticker that indicates the speeds: the writing is so small that it is difficult to see where you are at when altering the speed, but I guess you soon begin to get an idea of what



▲ Between centres work is a very smooth, quiet and vibration-free ride



▲ The toolrest is a tad short for longer spindle-type work

feels right as you become more confident. I'd be inclined to make a simple chart to indicate the speeds at set positions and stick it to the headstock pulley case for easier reference. Who knows, maybe the MKIII will have an easier to read dial or better still. a digital readout!

Alongside the speed dial is a small switch that alters the spindle direction to aid sanding work. You have to remember that in reversing the direction, anything screwed to the drive spindle can unscrew itself so any faceplate or chuck has to have a securing grub screw or similar. Whichever direction the lathe is running, it's a very smooth and whisper quiet operation with no vibration through the spindle.

No.2 Morse taper

The lathe has the bigger No.2 Morse taper fitting for the head and tailstock, normally associated with bigger lathes, which helps to achieve maximum surface bearing when the lathe is under load. The tailstock is also self-ejecting with any fitment removed by winding the quill back in. You can still eject through the hollow tailstock using the supplied rod if necessary; the same hollow feature is replicated in the headstock.

At the drive end the thread is a 1in \times 8tpi spindle for faceplate and chuck work, but if you already own other chucks and accessories from a different lathe spindle profile, there are thread adaptors available.

At the rear of the headstock is a large spring-loaded rotating disc that serves the dual purpose of acting as a spindle lock for removing accessories screwed to the spindle, or for decorative work, as an indexing pin, engaging into any of the 12 positions, holding firmly while you work.

In use

Before giving the lathe a workout, I did a minor bit of fettling: a little coat of paste wax along the beds to help the banjo and tailstock run more freely being the main one, with a run over the toolrest with a fine file to soften its quite sharp edge, which will allow chisels to move freely without snagging.

I started by turning a bowl or two to check the higher torgue involved – no problem in this area and I was taking some pretty meaty cuts to true the blank as well as the general shaping. Maybe not as attacking as our own Les Thorne when he goes in with a chisel, but I was happy enough! It's certainly a real boon to be able to set a relatively slow speed to true the blank before ramping it up with the dial to get nice clean cuts rather than swapping belts!

However, being a smaller lathe with limited capacity over the beds. I did find it made life more difficult when trying to take some cuts with traditional long-handled tools, specifically dropping the handle, as it clashed on the bed.

Also the tailstock gets you bunched up when working directly in line, but that particular problem is easily rectified by slipping the tailstock off the beds, which affords you plenty of elbow room.

Conclusion

I do like making pen kits and I've been putting the lathe to work in this area extensively and it hasn't let me down at all. The lathe is so easy to adjust for initial setting up as well as speeds and runs so smoothly in use. I've been getting really great results throughout and I'm certainly far more confident and able to experiment since it's been with me.

Only a couple of minor niggles keep this lathe from hitting top marks, but it's a lathe that hits the spot nonetheless.



▲ The Nova Comet II wood lathe – the beginner's dream!

Prices

typical values as we go to press. We cannot guarantee these prices, though, and thoroughly recommend that you shop around.

How we rate...

Don't get your hopes up or your wallet out! Well, it works but really needs improvement Performs well, but you will find better Great performance and value for money ***** So good, even Andy would get his wallet out!



Working the insides of bowls is easier with the tailstock removed



▲ Using a chuck is a great way to expand your horizons with any lathe



▲ The variable-speed makes the Nova brilliant for smaller projects, such as pen kits

Good working Verdict ne

+ Variable-speed; big motor; 2MT; easy reach adjustments; solid build quality

- Short toolrest; very difficult to see the speeds on the dial

Rating $\star \star \star \star \star$ Typical price: £474.95 (inc VAT) Weight: 35kg Motor: 550W Speeds: 250-680rpm; 530-1,420rpm; 1,380-4,000rpm Head and tailstock bore: No.2 Morse taper Swing over bed: 305mm Max distance between centres: 420mm Web: www.brimarc.com

Treatex Hardwax Oil

Treatex yourself!

Top marks are awarded for this oil finish, which offers exceptional durability and is easy to apply

Ithough this product is ideally, and primarily, suited for architectural internal woodwork, such as doors and floors, having recently attended a weekend woodworking show where it was being demonstrated, it piqued my interest to say the least! On the Treatex stand was a water feature turned from a variety of timbers.



Apply the Treatex with the lathe running on a slow speed and burnish as it runs

It was finished in Treatex Hardwax Oil and water bubbled up through and cascaded over it for two days solid without any sign of breakdown. It certainly shows that any general spills won't worry it!

So with the resurrection of my turning, this is certainly a great finish for bowls or other turned work that may come into contact with moisture intermittently and it has also been independently tested as a safe product for use on children's toys.

In use

For the turned work I tried it on, I applied a first coat with a cloth on a slow spinning lathe, allowing the oil to penetrate in and burnish before leaving it to dry. The downside is that it's quite slow drying, but after I'd applied a second coat and left it to dry, the result was a beautiful sheen and silky finish.



After it dries, a second coat is applied to leave a durable water-resistant satin finish

Conclusion

If you're looking for durability and enhancement of grain features as well as water resistance, Treatex is well worth the outlay.

The Woodworking Verdict

+ Exceptional durability; easy to apply

- Longish drying times for some applications

Rating $\star \star \star \star \star$

Typical price: £16 for a 0.5l tin Finishes: Gloss; Satin; Matt Sizes available: 0.5; 1; 2.5; 10l (gloss not available in 0.5l) Drying time: 3-6 hours between coats Web: www.treatex.co.uk



CompacTool turning set

Shorter & better

This set of tools is specially designed for smaller lathes and working in close quarters – ideal for novices, and there's no compromise on build quality



▲ The short length allows easy access without removing the headstock



▲ Taking deeper cuts can be strenuous on the wrist so a finer cut works best

n testing the Nova Comet II lathe, one thing I found was that turning bowls or anything directly over the beds was a struggle with longer turning tools, as in some instances, the handles prevented me from dropping them far enough to achieve the cut. I also had to remove the tailstock to access the work with the tools more easily, so having recently had a chat with Peter Hemsley, owner of The ToolPost, he informed me he had a set of short tools that were specially commissioned from renowned toolmakers Henry Taylor Tools under their Hamlet brand, which sounded like a good solution.

Tools up close

Having a closer look at this set it's immediately evident that these are of excellent quality. The set features short ash handles of around 150mm long including the brass ferrule, along with polished M2 HSS blades, which give the three gouges – roughing, spindle and bowl – an overall length of around 285mm.

Slightly shorter than this are the 12mm skew chisel and the 25mm bowl scraper, which are both around 250mm long.

Completing the set is a very thin, almost knife-like parting tool, with a blade just over 1mm-thick and an overall length of 220mm, including the handle, which is ideally suited for finer and smaller pieces.

No compromise

Although shorter, there's no compromise in the blades as each is as chunky and substantial as a standard length chisel allowing bigger cuts to be made with ease, but it's being able to manoeuvre easily around the work that sets these tools apart.

As with all turning chisels, the manufacturer's idea of optimum bevel or cutting profile and that of the end user may be different, so you may have to tinker to reach your personal preference, but aside from this, putting these chisels to use, I was immediately at home and more confident in making a cut, especially on over the bed or bowl work where, with longer tools, I was finding it difficult to get the cut I wanted.

However, as these are short tools, I found that when making either a substantial cut or working on a deeper bowl, the shorter handle imparts more strain on the holding hand. This is where the cantilever action of a longer handle reduces the strain but also introduces manoeuvrability issues, so it's a case of compromise and taking finer cuts to keep things on a steady plane. I also found the shorter length advantageous on between centre work, especially when making pen kits, as I discovered they were ideal for finer close quarter control. The thin parting tool is also an exceptionally useful addition on smaller work for either decorative grooves or general parting work.

I found it perfect when making a pen that needed 3mm of the turned barrel removed to act as a spigot – I had no tool that was fine enough to do this until this one came to hand and it worked like a charm.

Conclusion

As a set, these chisels have plenty going for them, especially if you like working on smaller pieces such as trinket boxes, small platters and bowls, etc. They are a great addition to any turner's kit for such work irrespective of the size of lathe.

Any novice should find they work really well and allow you to address the work correctly, no matter what the project. They've certainly made life easier for me on the Nova since I've had them on test, so it looks like I may well have to invest in a set!

The Woodworking Verdict

+ Ideal for smaller lathes; top quality construction

 You may have to regrind to suit your own purposes; deeper bowl cuts can be hard on the wrists

Rating $\star \star \star \star \star$

Typical price: £69.96 (inc VAT) Average length: 285mm Steel: M2 HSS Tools included: 25mm bowl scraper; 12mm roughing gouge; 12mm skew chisel; 10mm spindle gouge; 10mm bowl gouge; 1.5mm narrow parting tool Web: www.toolpost.co.uk

18 **GW299** Special 2015 www.getwoodworking.com

Easy Wood turning tools

A powerful trio

hile we'd all like to be as adroit at woodturning as our own Les Thorne or others of his ilk, inevitably there will be some who struggle, who want to turn in the easiest way possible, so step up to the plate, Easy Wood!

In general, the rule of thumb of turning is to keep the bevel rubbing, but to achieve this involves a lot of tipping, turning and twisting of the tools to gain the profile you desire, but get it wrong and the inevitable happens...

Snags, catches and disasters are but a millisecond away if the tool is addressed to the work incorrectly, but the Easy Wood tools all but eliminate the catches and snags, and also eliminate the need to have the bevel rubbing, along with the need to be a contortionist to get the tool in the correct position.

Just three tools

Each tool offers similar attributes: a solid square bar fitted to a long handle with three different lengths available, so you can select one that fits your work practices. At the end of each bar is the profile itself, featuring solid carbide tips. The roughing chisel has a square or slightly radiused profile; there is a roundtipped chisel for finishing and a pointed profile tool for detailing work. There's also a replaceable tip parting tool and a set of hollowing chisels for working vases and hollow vessels with restricted openings.

What makes life easy with all three of these tools is the way in which they are used. Each tool is kept in a parallel plane to the floor and simply moved along the toolrest. There's no need to lift or twist the tool at all, as the cut is made by pushing and traversing the chisel on the rest, moving it into the workpiece to make the cut. It really is an easy way of turning as you're not required to twist or alter the chisel's position – all the work is done in a scraping fashion and all you need do is concentrate on getting your piece to the desired shape.

Quick cutting

The chisels cut very quickly and the scraping and shaping tools can have their tips rotated to gain a fresh edge as needed, but with each chisel addressing the work in a direct scraping action. Despite making shavings, I found there is some detriment to the finish achieved in comparison to traditional chisels. On bowl work especially, I found the changes in grain direction gave rise to some rougher areas as



Each tool addresses the work at around 90° to make the cut

the chisels dealt with a cross-grain scenario both on the outer edge and inside the bowl. Taking finer, lighter cuts helps reduce this but it is still evident when compared to the finish a dedicated chisel will leave.

On spindle type-work between centres, the finish is better although you still can't quite get the glassy finish of the skew or a properly controlled gouge, so it does mean there's greater need for more abrasives than traditional turning would call for.

This is the downside, but while the Easy Wood tools are not cheap, if you struggle to address the tools correctly, these certainly get you in the right ball park to achieve some classic pieces. Anyone suffering a disability that may hinder the dexterity of arm movement that traditional turning requires could certainly gain a way into the craft with these tools.

The specialist hollow chisels are a little different, as these are designed for use in restricted openings. The finish isn't paramount as it's unlikely to be examined closely so these chisels may well find favour with the most dyed in the wool traditional turner looking to expand into such areas.

Conclusion

Alongside the benefits of easier turning, you may consider the additional costs involved in traditional tools and keeping them sharp. Some turners can work directly from a fast dry grinder with great success but many of us have to go for the often expensive jigs and grinding options and the Easy Wood tools eliminate all of these additional costs, as you just need to buy a new tip as and when.

So all in all, these tools do make life far easier for anyone struggling to use traditional gouges, although you do have to accept the trade-off in terms of the ultimate clean finish they afford you.



▲ The finish from the Easy Wood tool on the left of the blank isn't as clean as the right, which was completed using a bowl gouge



▲ Between centres work is again a very easy task using these tools



▲ I found the resulting finish is cleaner than on bowl work

These two curved tools are part of a set to work vessels with narrow openings

The Woodworking Verdict

+ Hassle-free; replaceable tips; very simple to use

 Expensive; the finish isn't as polished as on a traditional chisel

Rating $\star \star \star \star \star$

Typical price: From £56.95 Profiles available: Scraper; finishing; profile; hollowing set Handle sizes: Three available Web: www.woodworkersworkshop.co.uk

British-built brilliance

Proudly made in Sheffield, this deluxe sharpening system is simple, quick and effective in use – ideal for dressing and honing your tools

B ased upon a metalworking linisher, the first thing to note is that the ProEdge is not a machine designed for heavy grinding; this is a piece of kit for dressing and sharpening tools that are in need of restoring to their former glory.

Any substantial damage such as bigger chips or major reshaping of a profile is best done on a fast grinder before moving onto the ProEdge, which will allow you to define the profile and bring it up to cutting performance.

On doing so, you have at your hands an exceptionally versatile machine that when fitted with the appropriate belt – either aluminium oxide, zirconium, ceramic or trizact compositions, which are designed to cut metal, rather than grind it – will work



The supplied jigs

across all manner of steels from high carbon through to HSS and tungsten carbide as well as glass, ceramics and natural stone.

Despite not being quite as nippy as a fast wheel grinder, when fitted with a coarser belt you can achieve some decent removal to sort out smaller nicks or reshapes successfully and fitted with the appropriate grit, finer honing is easy to achieve.

Alongside this, removing the belt cover reveals a hub that allows a pigtail mandrel to be fitted, so a polishing wheel can be mounted to achieve razor-sharp edges.

Complex grinds

It must be noted that when attempting a coarser grind, you can cause heat to build up – this isn't a problem on HSS tools but on carbon steel, unless quenched, it can still burn an edge and pull the temper. If you do go for a heavier grind on such steel, then you need to be careful. The ProEdge is all about finer, light touches in general and should be used as a honing device rather than a grinder. Aside from this, the real power and innovation of the ProEdge lies in the very nifty toolrest and its fast adjustment between common angles. This takes care of a whole raft of general grinds, and alongside it, the lower boss bar allows more complex grinds on turning gouges of bowl and fingernail profiles.

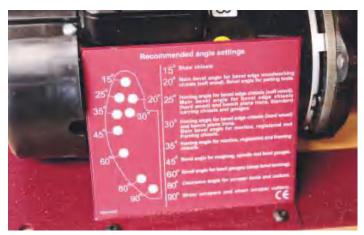
Easy angles

Looking at the toolrest platform firstly, the cleverly designed pivoting rest is fixed to a large template with a series of holes that, as it pivots quickly, align to any of nine common angles from 15 through to 90°, which can then be held with a substantial screw-in locking pin to secure it while you work.

A front panel on the ProEdge indicates the angle each hole represents as well as some very useful reference info, which shows the tools that are normally ground to these



▲ The captive spanner is used to lock off the toolrest



▲ This front reference panel shows the angles for each hole

Robert Sorby ProEdge Plus deluxe sharpening system



▲ You use these two tommy bars to track the belt



▲ The 'V' block cradle allows roughing gouges to be easily worked



Repeatable, fast accuracy is what makes the ProEdge sing



A substantial cam lever applies the belt tension

specific angles. Any angles outside of the presets are easily held by tightening the tool fence pivot pin with the clever captive spanner – no chance of mislaying this one! This pivot pin lock should also be used for the presets to ensure a solid working platform. Once tightened off, the desired position is held very securely: there is no flexing or deflection when the tools are placed on it ready for action.

A slot within the toolrest takes the jigs for standard work on square-edge bevels, such as chisels and planes or skew chisels for turning work.

The belt carrier can be tilted back to help achieve a comfortable working position when working any tools, and shallower angled tools, such as skews, are far easier in this position although in general, I found it more comfortable to use the ProEdge with it tilted back rather than bolt upright.

Working any tool is a cinch; either by adjusting the toolrest to a specific angle and using the appropriate jig for 90° work or for skews and moving the tools across the belt to make a consistent, accurate grind.

As well as this, a neat 'V' block jig that allows a roughing gouge to sit squarely to the belt means you can simply rotate the gouge within the 'V' block to make the grind.

It's equally as easy to freehand grind by placing the tool on the toolrest and adjusting it until the bevel sits fully on the belt and making the grind as per the jig work.

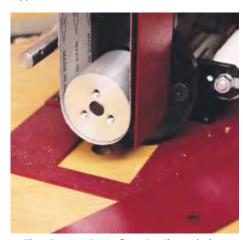
Boss bar

Removing the toolrest allows the boss bar to come into play. This is simply a rod positioned low and in front of the belt onto which you slide a substantial pivot hub – this then takes the Fingernail Profile Arm Jig. Altering the chisel projection within the jig as well as the angle at which it addresses the belt means that any profile can be replicated with easy repeatability and with its free movement, it's very easy to pivot and sweep the tool to maintain contact for a perfect profile each and every time.

Conclusion

There are two versions of the ProEdge available: the basic version, which comes without any jigs – just the machine – so the better option for across the board versatility has to be the 'Plus' reviewed here as it has three jigs, but with the oversight of omitting a square edge jig, which has to be purchased as an optional extra. Even so, the ProEdge is such a simple, quick and effective tool that it would fit in well in most workshops no matter what tools you need to keep up to scratch.

Add to this the fact it's made in the UK (Sheffield) and the build quality is excellent from top to toe. No corners have been cut here to save money and you'll not find any cheap knobs or adjusters – Chinese manufacturers take note!



▲ There's an option to fit a pigtail mandrel to the ProEdge



+ Fast and effective; easy to alter angles; repeatability; made in UK

- No square jig provided as standard

Rating **** Typical price: £365.13 Motor: ½hp Belt speed: 440 metres per minute Belt width: 50mm Preset common angles: Nine Supplied jigs: Skew; fingernail; roughing gouge Web: www.robert-sorby.co.uk







YOUR TRUSTED PARTNER

D&M Tools has been family owned and managed since 1978. During that time we have earned a reputation with our customers as a trusted partner. Whether you are a trade professional or a DIY enthusiast, our mission is a simple one - to supply top quality tools at the best value for money, backed up by a service you can trust.

LOW TRADE PRICES!

Whether you're buying online, by phone, email, post or visiting us in-store, D&M provides you with the widest range of quality hand, power tools and woodworking machinery all at the keenest prices.

OVER 10,000 LINES IN STOCK!

We hold massive stocks, meaning that most items are available for despatch the day you order it. Our website shows up to date stock availability, so you can order with confidence.

FREE DELIVERY

Delivery to UK mainland addresses is free for most orders over £99 and for orders under £99 is only £5.95. See the carriage rates on our website for full details.

1 HR DELIVERY WINDOW

We use DPD Predict for the majority of our deliveries (except heavy or oversize items) so you will receive a 1 hour delivery window via email or text meaning you don't need to wait in all day.

SHOP ON-LINE 24HRS A DAY

Visit our easy-to-use website to see what we mean about range and value. Browse and buy with confidence 24hrs a day from the



biggest brands in the business, all at prices you'll find hard to beat.

Here you will find all our **latest** offers and deals.

Why not **subscribe to our regular emails** to keep up with our latest deals and offers or join our **D&M Loyalty Scheme** and earn valuable loyalty points every time you shop.

More details on our website: www.dm-tools.co.uk

MAKE A DATE IN YOUR DIARY

VISIT OUR EXTENSIVE TWICKENHAM SUPERSTORE 73-81 HEATH ROAD • TWICKENHAM • TW1 4AW 020 8892 3813 • SALES@DM-TOOLS.CO.UK





7th-9th OCTOBER 2016

020 8892 3813 MON-SAT 8.30am-5.30pm (CLOSED BANK HOLIDAYS)



OUR CUSTOMERS LOVE US!

ARES DM-TOO

SS POW

MINER

ACCESS EQUIPMENT

660 Brushless Finish Nailer

We are regularly receiving 5 star reviews on the independent review site Trustpilot, as well as testimonials direct from our customers, here are just a few:

"D&M tools are very well priced, turn up on time and have superb telephone support just in case anything goes wrong. This is a business I will use in the years to come. Thanks for a job well done."

"Quick Quality Quantity and Value - D&M offer a fast efficient service which they couple with an excellent range of manufacturers tools which are always available in the numbers you need at a competitive price."

"Best customer service... Ever! - I believe the real test of a companies customer service is when they have to deal with problems. My delivery came quickly and well packaged. I had an issue with the tool after about a month of use. The guys in the phone quickly arranged for collection, repair of the tool and return with great communication throughout. Very pleased with the way they resolved my issue."

"Brilliant prices and brilliant service - I have now traded with D&M Tools twice now and both times have received impeccable service and also nothing is to much trouble for their staff to sort out."

"Excellent service makes a refreshing change - first time I have used this company, was quite amazed by the quality and speed of service and delivery, a fine example of what can be done with first class staff."

"**Best place for tools online** - I've bought a lot of gear from D&M Tools over the last few years and they always provide a first class service, plus they always seem to have everything I need at the time."

www.trustpilot.co.uk/review/www.dm-tools.co.uk







Back in the turning seat

SJÖBERGS

SJÖBERGS

6

Andy King dusts off his turning smock as he finds himself revisiting some past projects, getting to grips with acrylic and looking at some top pen turning kit

Learn with a novice



The Record DML305 cast-iron midi lathe allowed me to build my confidence when turning, but the new Nova Comet II has also been great



Issues of technique, like how far the rest should be from the work, are now beginning to become clearer

like to think that in most areas of woodworking I'm pretty adept, but when it comes to turning, I'm very much a novice.

Long-time readers will remember my period of being apprenticed to The Real Dave Roberts, for which I made one turned item per issue. I would do 99% of the turning, but the course was extremely intensive – it was like a three-year apprenticeship compressed into a couple of months. Also, we'd occasionally use chucks and tools that cost as much as a beginner's lathe. I'd wager that it made for more interesting reading than turning honey dippers, and I'm sure readers gained a lot from the series, but at times I did feel like I was in over my head.

Since then I've been trying to recall these lessons as I continue to progress on my own, largely through experimentation – both a fun and frustrating experience!

Strengths and weaknesses

I'm still prone to the odd mishap, but the beauty of turning is that you can easily turn your errors out – or incorporate them as features! Positioning the toolrest at the right height is key; even marginal movement can make a difference. Also securing the optimum distance between the rest and work is crucial:



Despite most turner's aversion to the skew chisel, I'm starting to get to grips with it and notice its benefits

too close and you'll be all bunched up, too far is dangerous; I've settled for 10-12mm.

I need to work on rolling my wrists and lifting and dropping the tool handle for certain profiles. Often I find myself on tiptoes. Perhaps my lathe is sitting a little high.

I'm pleased that I seem to be ambidextrous, though, preferring to swap hands rather than come back on myself for 'reverse' work.

Dave was against the use of skews as he could achieve the same results from other chisels. This is an impressive skill, but it left a hole in my education. My subsequent attempts to learn how to use them have been 'interesting' to say the least. Snags are an issue for me, and I don't find it easy watching the cut at the same time as watching the profile form on the horizon.

My work's still rather chunky – a long way off the 6mm high chessman made on a full-sized lathe I once saw. But I'm finding that the long handles of lathe tools allow fine control: a large swing of the handle doesn't mean an equally large one at the business end. Handy when adhering to the old woodturning adage of keeping the bevel rubbing.

Long handles also help with side-to-side movement, but not with rolling the chisel. I'm getting better at this, but am still prey to



Unfortunately, like most turners, I'm still prone to the occasional disaster!

Not too shabby for a beginner, eh?

snatches where the edge of the gouge catches the work and twists it – it's still trial and error really. I'd like it to be second nature eventually. I'd also like to get back to the stuff I was doing with Dave, where a combination of turned parts are assembled to make another more complex piece – maybe in the 2020s, eh?

Over the next few pages I intend to give you an insight into my turning adventures, which I hope you'll find more edifying than amusing. I'll also show you an exercise in turning an acrylic pen kit through to completion and share with you some of the great pieces of pen turning kit available, which certainly make things a lot easier!

I'll also be talking about some tools that I've found helpful. The true art of turning, like most woodwork, lies in hiding the construction. I'd like to reach the stage where no fixings from a faceplate, centre or chuck need to be hidden with baize.

Having said that, I'm a long way off these lofty heights. Some time in Les Thorne's company lately proved that I'm barely capable of noticing such marks, let alone avoiding them! We were looking at a clamshell-type box that had me completely foxed as to its construction. It took Les no longer than the blink of an eye to comment: "What a pity he left a small dent from the live centre." I'll stick to the basics first, I think...

Turning

Know your chucks

Using a chuck is a whole new area for me, but I understand the differences between centres and faceplate work a bit better now. Chucks add different dimensions to your work, and if you know what you're doing, you can achieve a final finish without any other work. For me now it's a case of learning what does what, and concentrating on the correct sequence. So, I thought I'd try some bowl projects to hone my skills...

Square bowl

This small bowl features a square-edged profile and was made using an offcut of beech. Using the threaded insert supplied with the chuck, I drilled the central hole and mounted my blank, making sure the speed was low; although the blank was only 125mm square, I didn't fancy losing control before I'd even started! The instruction manual put forward two options: expansion or compression; I could grip an outer edge or sit it within a recess.

Undercutting

I thought I'd go with a raised foot, turned within the correct parameters of the jaw opening. I marked it on the blank, defined it with the parting tool and turned away the waste with my scraper. After undercutting the foot to a slight dovetail to ensure the jaws grip, the next stage was to shape the underside. I found it hard to get my head around the flowing undercut, but, aside from some rough patches on the transitions between long and end-grain, it seemed OK. So, time for engaging the 'proper' cutting edge of the gouge... which snatched immediately. Should've kept that bevel rubbing, or chosen a different chisel, perhaps.

A re-scrape and reshape later, and the marks remained, so I reached for the gouge once more...and the same again! A lesson learned: I need to work on my gouging, or decide whether it is the right tool for this job in the first place. The key to a better – but not perfect – finish was to use a sharpened scraper.

Smooth finish

The square edge and undercut rim made sanding with the lathe spinning a bit of a challenge. I took a couple of sharp raps on my fingers where I pushed too hard, so I switched off the lathe and did it manually. I have to find out whether working this way is valid. I needed to be thoughtful about finishing, for which I applied a coat of sanding sealer, lightly sanded it to denib it, then applied a coat of wax. For the sake of my hands, I did this stationary.

With that done, it was on to unscrewing from the threaded insert and flipping the bowl, allowing me to grip the foot with the jaws. It had to be seated firmly, but without excessive force on the foot. A quick spin ensured everything was sitting well, after which I shaped the lip by rolling the edge – another new process for me, so I had to stop and check every few cuts.

The resulting lip wasn't what I expected! I had envisioned a flowing thin lip but ended up with a sort of blocky-wedged profile.



I wasn't really sure what would happen if I went further, so I settled for that, and went on to recess the bowl itself.

I was more successful here, achieving a smooth surface on my first attempt. The chuck made a great difference as it allowed me to take the bowl off a couple of times to look at it in its proper orientation.





I found it difficult to create the shape



The completed square bowl - not quite



But I found recessing the bowl quite achievable

Learn with a novice

Sapele bowl

Turning a bigger bowl made me realise why turners who turn big use larger lathes!

I could really feel the feedback through the chisel until the edge of my big sapele blank was trued up. To start, I opted for a gouge, but that caught so I settled on a scraper, which soon required a touch-up. I was thrilled to soon see ribbons of hot shavings flying off! Keeping the tools sharp is key in any woodwork. Seasoned turners can hone freehand on a dry grinder, but I need consistency – definitely a job for the Robert Sorby ProEdge Deluxe that I tested earlier.

Back to the bowl, then. I shaped the underside, as it was mounted in the screw insert for the chuck. This time I attempted a recess for the jaws by producing a slight undercut. Before this, I finished the bowl, running through the grits, then applying sanding sealer, denibbing and wax. I was pleasantly surprised with the finish from the chisel; there was minimal roughness on the end-grain, which came out smoothly after sanding.

Spinning the bowl end for end, I locked it into the chuck's expanding jaws. I thought this



Turning this item made me realise how much effort is required to hollow out a bowl!

was a better option than the compression. After a spin to check everything was OK, it was on to hollowing the bowl, for which I reached for the scraper again. I'd forgotten how much effort is required for bigger profiles; even the paltry 200mm diameter of this bowl was a strain on my forearms! Things became easier after the donkey-work, but snagging was playing quite heavily on my mind.

I was going to see how thin I could go, until I decided that chunky is the new thin – I wanted something to show for my efforts



I preferred loading onto the chuck over a raised foot



Turning a deeper bowl proved pretty strenuous on the forearms

other than shards! I cut the rim inwards as a feature, and knocked the internal edge of the rim off to sweeten any roughness of the grain transitions. Then it was sanding, sealing, sanding, waxing, and job done!

Coloured bowl

I thought I would try out some Woodloc gel stain on my third bowl, which had the same recess as the sapele bowl. I used another beech offcut, which turned out well, though the finish on the end-grain was rougher than I'd like.

The outside, with the chuck recess, was turned and sanded first before applying the oak



The oak stain was applied while stationary with a piece of kitchen roll...

stain. It's a gel, so doesn't sink in as much, though it did a bit on the end-grain. I sanded it back and applied a second coat, which evened it out, before moving on to sealing and waxing.

I also had some blue stain, and thought the contrast might look good in the hollowed bowl. Again the end-grain sucked it in a little, but a couple of coats blended it reasonably well.

I think I should've left it to dry a little longer, as when I waxed it with the lathe running I noticed the longer-grain areas had lost some of their colour. Still, not bad for a first attempt.

The rim was cleaned up, sanded, sealed and waxed to give an oak-stained outer, blue inner, and natural beech rim.



...and the blue applied while the lathe was still running



The bowl is basic, but pretty unique!

Turning

Square bowl – a second attempt!

I'm pretty pleased with my wormy edge!

With a couple of bowls under my belt, I thought I'd have another attempt at a bowl with a square flowing lip. I opted for a square blank again, drawing diagonals to find the centre, through which I drilled a hole for the screw adaptor for the Nova chuck. The plan was to leave a thin, flat lip with a bowl below, and raised lip above.

Well, that was the plan, but where to start? My Nova chuck has made life much easier, but it was still a tricky proposition. The timber was sawn and dirty, so I didn't know what it was until I squared it up (I opted for a 120mm blank) revealing... beech, again! I made the first cuts to define the underside with a bowl gouge – sadly the chisel caught and lifted a huge chunk from one edge. There was plenty of meat left so it could be turned away, but I thought it'd be best to switch to a scraper. This seemed a better option, but, with the outer edges clipping as the blank went past the tool, I made sure to turn from inside to out to keep the contact light.

I achieved a rough bowl shape and then altered the rest to define the shape better, still using the scraper before switching to a skew to improve the finish and define the rim. I'm not sure if the latter chisel selection was the right one, but it did a good job.

I got a good finish on the base with the skew. The usual recess for the chuck and sanding and sealing followed. The rim was hand sanded, the rest with the lathe running. Flipping the blank, the trepidation began.

I again opted for the scraper to turn away the waste, leaving a raised centre area for the lip. I bottled out when the square rim was at 4mm, despite only now noticing some woodworm trails on the rim. Again, I cleaned up with the



Disaster strikes! My bowl gouge is responsible for this



Turning out these woodworm trails was a job too far

skew before dishing the bowl, sanding (with the grain on the square rim) and sealing. All in all, not too bad for a first attempt I'd say!

Offset turning



A decent chamfer on the edge prevents the lacewood from chipping

I've seen some very clever examples of offset turning, so thought I'd give it a whirl, keeping the offset minimal, as befits my competence. I decided on a simple clock, as I had a Record insert. This also gave me a chance to experiment with hot melt glue and a non-circular blank (a wedge of lacewood).

I cut the blank on the table saw, cleaning up the edges with a plane. Lacewood chips easily, so I put a bevel on both sides with a block



Hot melt glue on an MDF backer screwed to a faceplate holds the blank securely

plane, sanding everything before putting it on the lathe. A turned round piece of MDF screwed to a faceplate was the backer for the glue.

The offset was minimal, with the clock just below the centre of the blank. The smallness of the timber kept vibration low so it was a matter of using a parting tool to define the edge and remove the remainder. A coat of sanding sealer while it was still on the glue chuck, a light sanding and a coat of wax followed.



My offset clock, made using a piece of lacewood

After splitting away from the glue chuck with a chisel, the glue residue was pared away, then more sanding, sealing and waxing. I'll attempt a bigger offset when I get more confident. But let's learn to walk before attempting to run...

Learn with a novice

Spalted timber

There was some spalted timber in my pile of firewood, so it seemed logical that, while I was experimenting, I would have a go at turning some of it. Rather than knocking off the corners of the split log, I thought I'd true it up 'as is'. It was, therefore, pretty daunting working it between centres – the corners almost seemed to be banging the tools from my hand until it rounded over. When I stopped the lathe I saw a rough edge the chisel missed entirely – design feature? Why the devil not...

I was hoping to make a bud vase, retaining the rough edge on the lower part, but a big chisel fracture near the prospective flared neck put paid to that idea. I assume this is down to the fragile nature of spalted stuff (it was very Despite my best efforts, my wife and daughter didn't see this as a viable replacement for our current barometer!

light). I decided the best course of action would be to start again with a new piece of timber, and a new idea. Years ago I turned a lump of sapele and fitted a cheap barometer into it. I have to say it's worked admirably, but the sapele has always looked like a car tyre with an ovolo mould.

Spalted stuff looks good with natural edges, so my new plan was to plane a couple of flats to tidy up the split wedge shape, and let it sit on a surface, and then use the screw insert for the chuck and face the piece up on the lathe, recessing for the old barometer. Of course, this was a recipe for chatter. I opted for the scraper, taking it very gingerly. A couple of passes and it was on to sanding, which I had to do stationary. One thing going for spalted timber is that it is easy to sand!

Now for the recess for the barometer, which is no harder to produce than marking the diameter and turning, starting with the parting tool, and then the scraper. Finesse wasn't necessary, but a snug fit was, so I kept checking that I was on track as I turned. Barometers need a hole for the pressure to register, so I drilled through the scruffy hole where the threaded insert screwed in, killing two birds with one stone. I tidied it up with a countersink to make sure it looked intentional. After sanding, I applied spray-on lacquer, followed by wax, and the result was this!



The shape of the blank makes this a rather unstable operation!



I cut the recess diameter with a parting tool before removing the waste

Turning

Step-by-step pen



One area where I am pleased with my progress is turning acrylics. When I first set out using them I was getting a lot of chipping and relied heavily on abrasives to iron out any problems but once again, Axminster's Colwin Way came to my rescue and showed me where I was going wrong.

As with many a turning task, what one turner will see as the right tool, another may do equally as well with another. And with that in mind, I now get really good results with a 10mm spindle gouge, especially on shaped profiles, although I'm now happy enough to switch to a skew when I'm looking to finish a straight barrel on a pen.

The 'wow' factor

My early mistake was to address the blank too square on without letting the bevel rub and in doing so, end up with a combination of chipping as well as an occasional catch. There was also the odd time when I got the acrylic to turn properly as I moved the tool into a position where it did what it was meant to do, but without me sussing what I was doing correctly! Now I'm more on board with the principles of turning and with acrylics especially, I love the 'wow' factor they give when they are made into a pen or other kit.

Upping your game

What has upped my game especially is the use of a chuck on the headstock to hold the blank, (**Pic.1**), which allows me to control the drilling of any blank using a standard three-jaw chuck in the tailstock to hold the drill.

Winding the quill in at a controlled rate and frequently removing it to clear the build up of waste results in a very clean central hole, which then makes gluing the tubes within them a lot more of a successful operation, when compared to some of my early attempts.

Strong hold

Equally, since having the Axminster Evolution Compression Mandrel on test (see page 34), I'm finding the work is held exceptionally well, (**Pic.4**), which allows me to concentrate on getting the turning done rather than dealing with the flexing or movement that my standard mandrel is prone to.



▲ Pic.2 Glue the tubes into the blanks using your preferred adhesive



▲ Pic.4 Mount the blank onto the mandrel with the correct bushings for the kit



▲ Pic.3 Ream the blank back to the brass barrels ensuring you don't go too far



▲ Pic.5 Turn the acrylic on a fast speed for best results, keeping the chisel angles to shear the cut



▲ Pic.1 Drill the blank with the correct diameter hole to suit the kit

Knocking into shape

So with the blanks glued up and mounted, (**Pic.2**) first off, if using a square blank, knock the corners off and get things round, (**Pic.5**).

I find this is best done with the chisel skewed to the piece and the handle dropped slightly, working across until things become more smooth under the chisel. Acrylic works well at a decent speed so set the lathe to about 1,400rpm and keep it there for the whole of the turning process.

Different shapes

You can experiment with shapes on most kits, although some of the pen ones look more elegant with a straight barrel, while others have a more cigar-like shape. Even the slim basic pens can have a little flare introduced to alter them from the norm.

I quite like to put a curve or two into some of my efforts, and with the old adage of keep the bevel rubbing, it's just a matter of doing so, then marginally adjusting the angle until the cut starts.

Ambidextrous turning

Moving across the work and rolling the tool will begin to shape the blank to suit, (**Pic.6**) although, as I stated earlier, one thing that's been pointed out to me a couple of times by 'real' turners is that I am ambidextrous when it comes to turning, which proves pretty useful – I am quite at home turning badly in either direction! On a more positive note it does mean that I'm quite comfortable holding the



▲ Pic.6 I find it easier to work left- or righthanded to suit the direction I'm turning

Learn with a novice



▲ Pic.7 Get close to the bushings, leaving enough to take a fine finishing cut and sanding

chisel in either hand to suit the direction I'm turning, which is ideal for rolling and shaping curves on this type of work.

This particular kit is a straight-barrelled rollerball pen so it needs to be as straight as possible before doing any sanding.

You can turn both parts at the same time if you have a set of three bushes that allow it, but I only have two suitable ones so I've turned each one separately.

I find it easier to turn the blank to a rough cylinder and then taper each end down to just shy of the bushings, (**Pic.7**) to make a cigar shape, then remove the central part to bring it into the parallel tube needed for this kit.

Ride the bevel

After knocking the corners off and now understanding that slanting the chisel and dropping the handle gives a controlled cut, it's very easy to slide the chisel across the toolrest, riding the bevel in the process.

Get it right and you should start seeing fine ribbons of acrylic; the only downfall is how quickly they entangle around the mandrel and the workpiece, although it's easy to simply pull them away as you go. Extraction is a must here as well as suitable PPE, so make sure you're all kitted out before you make a start.

I can now get a good finish directly from a spindle gouge ground to quite an acute bevel and get things pretty straight as well, which is essential for pens with parallel barrels. You can now take a few light passes to get the barrel down just fractionally thicker than the bushings, which will allow for final sanding. I normally stick with the gouge but it doesn't



▲ Pic.11 With grits from 1,200-12,000, the final finish is glossy and deep



▲ Pic.8 A final pass with a skew can be made to get things as clean as possible

hurt to give it a final flourish with a skew chisel (**Pic.8**) if you feel the need.

Polishing up

Once you are happy with the finish from the tool, it's all down to abrasives, and it's here, as with any project, that makes or breaks all your hard work, so put the time in to get the rewards, as acrylics need to be polished up very finely.

Keeping the lathe at the same speed, I normally start with a relatively fine grit paper, 240 grit, then on to 320 grit (**Pic.9**). I've recently been using Abranet for this – it really is superb for this type of work as the open mesh design means dust doesn't build up on the paper and cause unnecessary heat build up, which can be detrimental to the work. It's all about maintaining a light touch and keeping the abrasive moving across the surface, which will ensure that the barrel doesn't get too hot or over-sanded in one area.

The next step is to move on to the finer abrasives, and here the MicroMesh pads (**Pic.10**) available from most turning suppliers are first class. I've used these in the past but it never occurred to me to use them wet, which is why I've never quite achieved that ultra-glossy finish! Again, I have Colwin Way to thank for steering me in this direction as well as the simple tip of numbering each pad with a marker pen so you don't have to keep referring to the colour chart to check the grits! Spend plenty of time progressing through the grits, ensure they remain wet as you work them and you'll begin to see the polish start to pick up and the acrylic will take on a real depth of



Pic.12 Assemble the pen ensuring you get all the parts in the correct order!



▲ Pic.9 Abrading with fine dry abrasives gets the barrels clean and uniform



▲ Pic.10 Moving onto MicroMesh pads, keeping them wet allows you to achieve the ultimate mirror-like finish

sheen. As a final flourish, a fine polishing paste such as Autosol or similar can be rubbed on with the lathe still running before a final buffing with a soft cloth or tissue, which should leave you with a very glossy, mirrorlike finish (**Pic.11**).

Pen assembly

Now it's all plain sailing – get the parts ready and follow the instructions to assemble (**Pic.12**). I've used my bench vice on many an occasion but it can be a tad awkward, so having a pen press on test for this issue (see page 35) makes it very simple as it is far less fraught. This may not be so traumatic on a basic kit, but some can cost in excess of £40, so you don't want to slip up at this late stage! Once assembled, you should now get plenty of 'wow, did you really make that?' comments, (**Pic.13**) and of course, any of these kits make great gifts, which is great seeing as Christmas is just around the corner...



▲ Pic.13 The final result – a glossy pen. Note the continuation of the pattern

Turning

Axminster Evolution compression pen mandrel

This mandrel is a worthy addition for anyone who makes pens or kits on a regular basis, as it allows the maker to get better results from the off in comparison to traditional mandrels.

With standard mandrels working with the centre bar held between the live centre and a revolving centre, it can be all too easy to over-crank the quill pressure and deflect the rod enough to cause the work to turn out of whack. On work that needs accurate concentricity, this can leave the final piece with misalignments on the fittings once they are assembled, which doesn't look great.



Simply load up the blank with appropriate bushings, bring the tailstock up until it engages the bushing, then tighten the quill and you're away Axminster's Evolution mandrel removes this hazard by putting the pressure directly through the piece to be turned, rather than the centre rod.

The live centre has a rod secured within it and takes standard kit bushings to suit your project. It also comes complete with a set of 7mm bushings for the slimline pen and other basic kits.

The revolving centre is hollow, which allows it to slide over the rod and push up tight to the bushings so that when the quill is tightened, the pressure is directly on the bushings, which puts the blank into compression and prevents it from deflecting as you turn.

To give more room when turning smaller pieces, there are also two tapered cones, which give you a little more room to get the tools in on the ends of the work.

Easy to use

The mandrel is so easy to use: it takes just seconds to place a new set of blanks on ready to turn, and it's equally as quick to remove the turned pieces as there is no unscrewing of parts or removal of anything – simply pull the tailstock away and the hollow revolving centre remains in the stock, exposing the centre rod to slip the blanks on or off.

This really is a top-class accessory that works flawlessly and for any turner, even if you only occasionally turn the odd kit or two, the results from this mandrel will allow you to reap rewards in both the end results and the speed and ease at which you can get to work. It also represents good value for money, which is why it gets full marks from me.

The Woodworking Verdict

+ Fast adjustment; superior turning results – None

Rating $\star \star \star \star \star$

Compression Pen Mandrel

Price: £41.95 Tapers: 1MT; 2MT Standard bushings supplied: 7mm Tel: 03332 406 406 Web: www.axminster.co.uk

Axminster Pen Barrel Trimmer



The brass tubes should be glued in to allow for the blank to be trimmed back

Before turning any kits, the blanks have to be shortened to the correct length to ensure the parts go together correctly. A reamer makes short work of things, and this one covers a range of common tube sizes to allow fast and clean reduction. Simply slacken the grub screw, slip out the barrel adaptor and replace with the one to suit the kit. Fitted into a battery drill I



Fitted into a battery drill, the reamer quickly reduces the blanks squarely

found you can hold longer blanks and ream them successfully but shorter lengths will require a vice or similar to hold them.

The kit works well on both wood and acrylic blanks but you need to be careful not to push too hard as you approach the brass tubes. However, for fast and efficient squaring up of blanks, it's a real asset to a pen maker's tool kit.



The Woodworking Verdict

+ Presents a fast, easy way to ream excess material

- Smaller pieces need to be clamped

Rating ★★★★★ Price: £27.46 Tube diameters: 7mm; 8mm; ⅔in; 10mm Tel: 03332 406 406 Web: www.axminster.co.uk

Learn with a novice

Axminster Deluxe pen assembly press

Turning kits are a great way of showing off your turning skills and while some are quite cheap to buy and easy to make, some can be both expensive and more complex.

At this end of the scale especially, assembling them after you've spent time turning and polishing the parts to a high standard can be a little fraught, especially if you rely on the normal bench vice or similar to push the parts together.

A pen assembly press makes this a breeze and on a more expensive kit, helps ensure it all goes smoothly and this one from Axminster is particularly easy to use.

Rock-solid construction

It's a rock-solid piece of construction: the lever handle is long enough to apply plenty of pressure for minimum effort, allowing you to easily get more fiddly components into position before nipping them up and finally pushing them fully home. I found it also allows a really



fine control as the parts are pushed in.

The base is made from thick pressed steel and can either be placed on the bench as needed or screwed to a suitable place; even vertically on the wall, which could prove useful for some more fiddly parts.

The jaw opening has a maximum capacity of 142mm, which is long enough for the common standard kits available, and with 32mm of travel, more than enough to push the fittings fully home.

The threaded bar is an Acme-style coarse thread so it will fast adjust to fine-tune to a particular fitting, but there's also an override to disengage the thread and slide the bar in or out, which can be achieved by pushing down on the large gold coloured button.



Pressing the gold button overrides the thread for fast adjustment

The end of the thread has a large nylon pad to help prevent damage to the fittings as they are pushed in, as well as a central dimple to help keep things aligned when you first apply the pressure.

The press works in exemplary fashion, and for the more avid kit turner or those doing it on a more commercial basis, the outlav is worth it for the peace of mind it affords.

The Woodworking Verdict

+ Fast adjustment; very easy to use; fine control - A little expensive

Rating $\star \star \star \star \star$

Price: £58.96 Max opening: 142mm Max travel: 32mm Tel: 03332 406 406 Web: www.axminster.co.uk

Zap Z-Poxy adhesive



I've got a fair few pen and other turning kits under my belt now and, in most cases. I've relied on CA adhesives to fix the tubes to the turning materials. Pretty successful in most instances, but I've had a few failures where the adhesive seems to have degraded. Having discovered the Z-Poxy two-pack adhesive, I've been

putting it to good use and it's proved excellent.



Equal amounts are used to make up the adhesive



You need to mix the resin and hardener thoroughly

Tube gluing made easy

It's an epoxy adhesive comprising a resin and a hardener that are mixed in equal quantities. The product comes in 5 and 30 minute formulas so you can choose the one that best suits your needs. It dries clear if you have a bonded edge on show, and is also shock resistant, which comes in handy.

I've had the five-minute one on test and with its thick consistency, it works really well when gluing tubes into blanks with any minute voids filled with the adhesive. Of course, its uses on other projects are myriad.



Spread the adhesive them into the blanks



Leave to dry before onto the tubes and twist reaming them to length

100% success

It doesn't take a lot to glue up a project, and with the twin bottle pack it's easy to squeeze out a small amount so wastage is minimal. The only downside I found is that when twisting the tubes into the blanks, the glue is really sticky on your fingers as it builds up around the blank but on the plus side, no danger of finding yourself permanently attached, as can be the case with superglues!

So far I have had 100% success with around 30 projects glued and turned. It does go off really quickly so you can get a batch pre-drilled, then do a quick bit of gluing and you're ready to go in next to no time. I think I'll stick with this from now on!

Good Woodworking Verdict The

+ Different speed adhesives available; easy to apply; economical

– Stickv!

Rating $\star \star \star \star \star$ Typical price: £19.96 for a 4oz bottle Setting speeds: 5 or 30 minutes Tel: 03332 406 406 Web: www.axminster.co.uk

Turning

Useful info

If you're looking to buy woodturning tools, equipment and blanks, then these suppliers will have everything you're looking for:

TURNING SUPPLIERS

Axminster Tools & Machinery Tel: 03332 406 406 Web: www.axminster.co.uk (Devon)

BriMarc Tools & Machinery Tel: 03332 406 967 Web: www.brimarc.com (Devon)

Classic Hand Tools Tel: 01473 784 983 Web: www.classichandtools.com (Suffolk)

Just Wood Tel: 01292 290 008 Web: www.justwoodonline.com (Scotland)

Lincolnshire Woodcraft Tel: 01780 757 825 Web: www.lincolnshirewoodcraft.co.uk (Stamford)

Peter Child Tel: 01787 237 291 Web: www.peterchild.co.uk (Halstead)

Simon Hope Woodturning Tel: 01206 230694 Web: www.hopewoodturning.co.uk (Essex)

Snainton Woodworking Supplies Tel: 01723 859 545 Web: www.snaintonwoodworking.com (North Yorkshire)

Stiles & Bates Tel: 01304 366 360 Web: www.stilesandbates.co.uk *(Kent)*

The ToolPost Tel: 01235 511 101 Web: www.toolpost.co.uk (Oxfordshire)

The Turners Workshop Tel: 07870 587 615 Web: www.theturnersworkshop.co.uk (Newcastle Upon Tyne)

Turner's Cabin Tel: 01522 857 144 Web: www.turnerscabin.co.uk (Lincolnshire)

Turner's Retreat Tel: 01302 744 344 Web: www.turners-retreat.co.uk (Doncaster)

Turner's Toolbox Tel: 01873 831 589 Web: www.turnerstoolbox.com *(Gwent)*

TIMBER SUPPLIERS

A Harrison Tel: 01536 725 192 Web: www.aharrisonwoodturning.co.uk (Northants)

Black Isle Woodturning Tel: 07842 189 743 Web: www.blackislewoodturning.com (Scotland)

Brodies Timber Tel: 01350 727 723 Web: www.brodiestimber.co.uk (Perthshire)

D Emmerson Timber Tel: 01507 524 728 Web: www.emmersontimber.co.uk (Lincolnshire)

Earlswood Interiors Tel: 01564 703 706 Web: www.earlswoodinteriors.co.uk (Solihull)

Exotic Hardwoods Tel: 01732 355 626 Web: www.exotichardwoods.co.uk *(Kent)*

G&S Specialist Timber Tel: 01768 891 445 **Web:** www.toolsandtimber.co.uk *(Cumbria)*

Good Timber Tel: 01327 344 550 Web: www.goodtimber.com (Northamptonshire)

Interesting Timbers Tel: 01761 241 333 Web: www.interestingtimbers.co.uk (Emborough)

John Davis Woodturning Centre Tel: 01264 811 070 Web: www.johndaviswoodturning.com (Hampshire)

Lincolnshire Woodcraft

Tel: 01780 757 825 Web: www.lincolnshirewoodcraft.co.uk (*Stamford*)

Ockenden Timber Tel: 01588 620 884 Web: www.ockenden-timber.co.uk *(Powys)*

Olivers Woodturning Tel: 01622 370 280 Web: www.oliverswoodturning.co.uk (Kent)

Surrey Timbers Ltd Tel: 01483 457 826 Web: www.surreytimbers.co.uk (Guildford)

Sykes Timber Tel: 01827 718 951 **Web:** www.sykestimber.co.uk *(Warwickshire)*

Timberman Tel: 01267 232 621 Web: www.timberman.co.uk (Carmarthenshire)

The Timber Mill Tel: 07966 396 419 Web: www.thetimbermill.com *(Cornwall)*

W L West & Sons Ltd Tel: 01798 861 611 Web: www.wlwest.co.uk *(Surrey)*

Yandle & Sons Ltd Tel: 01935 822 207 **Web:** www.yandles.co.uk *(Somerset)*

Stay sharp with the **T-7**

Water Cooled Sharpening System

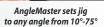
- Tormek Original Grindstone sharpens all qualities of steel including HSS
- Silent 200W motor rated for 25,000 hours of continuous usage without heat
- Sturdy steel frame with ED coating for best protection
- Stainless steel main shaft with Ezylock
- Includes leather honing wheel and compound for razor sharp edge
- Supplied with comprehensive handbook and starter DVD

Standard specification includes:



stone for a 1000 arit finish

Square Edge Jig for plane irons and wood chisels



Now £439.96

Normally £529.96

Code 502867

Truing Tool makes grindstone exactly round and flat

11

Sharpening Innovation

5G-25(

Made in **Sw**

10 YEAR

Prices include VAT and are valid until 31st December 2015

For more information call 03332 406967 or visit brimarc.com







ORDER ONLINE OR ALL PRICES CARRIAGE PAID UK MAINLAND



CALL 01484 400488 - OFFERS END 31ST DECEMBER 2015

NMATOOLS.CO.UK INFO@NMAUK.COM 100

Combination machine



C3 31 Comfort COMBINATION MACHINE + **STARTER-SET**

- 4.0 HP (3.0 kW) motor
- Format sliding table 2000 mm
- 1100 mm outrigger table
- Precision mitre index system
- 1300 mm crosscut fence for outrigger table
- Planer fence tilts from 90° to 45°
 Surface planer table length 1400 mm
- Planing width 310 mm
- Remarkably user friendly Allows rapid retooling



Universal saw blade Ø 315 mm, Z 48



Cutterhead set Universal cutter head (steel made)





FELDER AN 12

AF 12 dust extraction extractor

with dust bag quick change system

Woodworker's journal

Home truths



Bryan's open-segmented fruit bowl

Edward Hopkins

meets Bryan Cath, a segmented turner with a complex and mathematical mind whose pieces will leave you scratching your head in wonder



Fine-tuning

f I have a beef with woodturners, it is when they use one half of their brain and neglect the other. Yes, you have to be something of an engineer: wood is a troublesome material, especially when it's whizzing round at invisible speed. You have to be skilful; you have to be a problem solver; you have to be determined, but all this will count as nothing if the end result of your labour is clumpy or unrefined. However long it has taken you, however much effort it has absorbed, you will have written a book that no one wants to read and cooked a meal no one fancies eating.

The obverse is not quite true. If your turnings have style and poise, then the odd blemish might be overlooked. These days we're all prepared for – we even welcome – the 'imperfections' in timber; they show us more of the nature and inherent beauty of wood. Might we not also accept shortcomings in our turning technique as long as the vision is strong?

Bryan Cath agrees with my first point but not with my second and it doesn't take long to see why. His work is a tour de force; it's almost frightening. Do I need to say anything about the segmented bowl shown in the lead image apart from 'good heavens!'? "I turn the inside first and completely finish it. I get it spot on, then I turn the outside to match," says Bryan. Yes, alright: that sounds easy.

Woodworker's journal



Bryan's prizewinner took him six weeks to make



Some designs are born and raised just in his head, but the Gherkin demanded lengthy mathematics and calculations

A thousand pounds And what about the piece shown here,

And what about the piece shown here, his favourite and a prizewinner? The concept is bold; the design painstaking; the lines balanced and the execution immaculate. "Working mornings or afternoons, never evenings, I have to be alert: one mistake and it's all over." It took him six weeks to accomplish; a figure that befuddles some fellow members of North Devon Woodturners of which he is Chair: "They think I'm crackers!"

Most of them, like Bryan, are amateur and do not rely on turning for their income (he now makes a living building and maintaining websites) but what price should such a piece



The Gherkin – the inspiration for Bryan's most complicated piece



"Cutting lists are boring to some people, but to me they're quite interesting," Bryan explains

Home truths



Bryan's Kity combination machine - a jack of all trades

command? And what, when a gallery has slapped on its 100% mark-up? You'd probably have to part with a grand. Instead this piece sits largely unseen in his dining room. "My wife loves it: she won't allow me to sell it. I must have had four attempts at the top." The more complicated, difficult and challenging the task, the more likely Bryan is to attempt it. And if there is one word that Bryan uses over again about himself throughout our meeting, it is 'fussy'. Let's run with that. Ever experimental, the piece in the background, bottom left is an upturned bowl within a bowl – a flying saucer.

Mathematical precision

Looking at a selection of extremely complicated pieces, I ask him 'what's your failure rate'. He hesitates. "I don't have a failure rate; I'm a fussy sort of... no, come and see." We go downstairs to his basement. In his small and surprisingly cluttered workshop ("It's usually spotless") is a model of Norman Foster's Gherkin. It's in bits, and it's going to stay that way. Bryan has tried and tried again but has finally admitted defeat. "I was asking too much of all the glue joints; it drove me round the bend" No shame there. ("You rotter! You're really going to take a picture of that?")

Some designs are born and raised just in his

Bryan's finishing kit – note the many polishing mops, which are required to deliver that mirror-like surface

head, but the Gherkin demanded lengthy mathematics and calculations. "Cutting lists are boring to some people, but to me they're quite interesting."

Cutting segments

The centre piece of Bryan's workshop is a Kity combination machine, which he bought when he was 23. "It's fantastic. It has a saw, planer, spindle moulder and mortiser all running off one motor and it works perfectly well. They're still available on the second-hand market as the old boys don't need them anymore."

It is accurate enough to cut the segments at the required angles. These he takes from his cutting list... to a digital square... to the saw

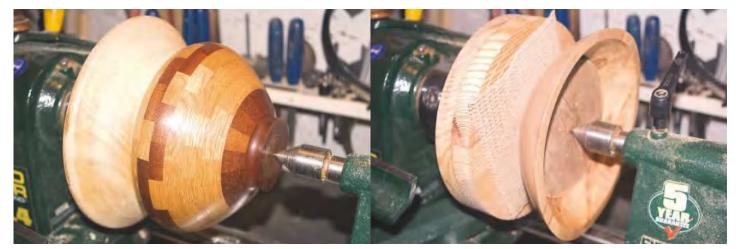


The machine is invaluable due to the accuracy it affords him when cutting those precise angles



bed and from thence to a large disc sander set up in a similarly precise way.

"Probably the biggest weakness of all woodturners," Bryan comments, "is trying to finish on the lathe. However fine the grit, you simply cannot stop seeing all the rings, even if they're microscopic." Bryan finishes his pieces hand-held against a buffing wheel laced with cutting paste. Then he polishes with carnauba wax and buffs up "until you can see your face in it." Seeing such excellence, you and I might



Two holding devices: a non-slip mat (right) and a cone (left). "It's another part of me being a perfectionist that I want someone to pick up a piece of mine and say 'well, how the hell did he hold that?"

Woodworker's journal



aspire to the same. Perhaps with patience and application we could produce such marvels. Well, call me fatalistic, but I think it's already too late. And I don't think it's the sort of work one can choose to do: it either emanates from you or it doesn't.

Finding the problem

Bryan's father rose to become Principal of Coutts, and hence the Queen's bank manager: high expectations were probably always in Bryan's blood. When he was 11, he bought his first lathe, "a pressed tin thing driven by a two-speed electric drill. It was horribly flexible, and if you had dig-ins, pieces would take off and fly across the room." He read articles in woodworking magazines and, along with trial and error, by the age of 13 he had mastered turning between centres. He acquired a Coronet lathe which, with its belt change speeds and faceplates "was far more exciting, and I started to enjoy myself." Now he has upgraded to a Record variable-speed lathe. Candlesticks in sycamore and ebony with brass insert cups. The challenge here was to make the two identical

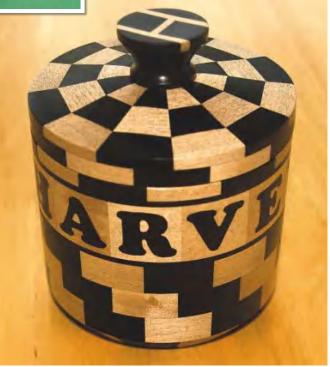
Harvey is Bryan's new grandchild. Letter and background are cut in one operation with the scrollsaw table "at peanuts of an angle:" the kerf disappears as the letter push-fits As a child, he played with Meccano ("I love gearboxes"). He took his bike apart and put it back together, followed by his motorbike, then his car. Nothing was safe. Much later he bought into the motor trade running a franchise of Suntester diagnostics, which he grew to be the largest franchise in the country: a mobile service tuning the BMWs and Rolls Royces of stockbroker Surrey and Hampshire.

Always ahead of the game, he noticed that manufacturers were restricting the software that allowed others to tune their engines, so Bryan sold up. Swapping tense customers who might threaten to sue if he fluffed their tuning for customers who laughed it off if he burnt their toast, he bought a nine-bedroomed hotel in Ilfracombe. 'Brave?' I suggested. "Yes, a bit mad."

'So you like people?' I enquired. "Oh yes!" But hotel work was mundane. At the end of his first season, he was bored. "It was boring. It was definitely boring. It was boring as sin." And, neither drinking nor smoking, and hating the smell of smoke, he was sick of running a bar. Something had to change. Other people might have sold up and moved on, but Bryan had found what he needed: a problem.

Bryan (let me jump around) has a very active brain, especially first thing in the morning and late at night. He doesn't watch horror movies; he turns away from their trailers. He won't even watch the news because, bad as it is, he will make it worse. He will become the Syrian refugee and will extrapolate all manner of grief, living through it as if it is real. It'll haunt him for days.

A blessed relief is walking. Back then, and still now, he'd pull on his boots and stride out across Exmoor – here he can relax. He'd return home and write up the walks, some wonderful:



Home truths

some less so; and he published booklets. Then, back in 1986 before this sort of thing became popular, he hit on an idea. Why not create package holidays for walkers? He'd minibus guests to the start of a linear walk and pick them up at the end. "It was such an obvious idea. I asked the Tourist Information Centre why no one else seemed to be doing this". "Because hoteliers are lazy" came the answer. Not this one.

Bryan contacted outdoor journalists and entertained them to a free holiday. He was rewarded with pages and pages of implicit praise, and his venture took off.

I had already noticed the fine professional photographs of mountains on his living room



As you can see, Bryan's pretty handy with a scrollsaw too

wall, well composed and well exposed. I guessed: 'Did you take those?' He had. "I was good at art at school."

I then became emboldened. Here was a very interesting character. Engineer, perfectionist, communicator, writer, artist; easily bored, gregarious, patient, entrepreneurial... I took a chance. Most people, when I steer the conversation towards astrology, turn off or turn away, but I wanted to know more about him. 'Have you had your natal chart drawn up?' I asked. "Double Aries" he replied: "sun conjunct the moon. I've always believed in astrology. I'm not religious in any shape or form but I'm open to this." A few moments later, he had found his chart.

'Do you begin things but not end them?' I asked, half-knowing the answer. "I did until quite recently, but I've grown out of that." 'And are you forthright to a fault?' "Yes, I tend to tell it as I see it. A lot of people can't cope with that and I do upset them." 'What are you like at expressing your emotions; knowing your emotions?' "I used to be hopeless; all locked up, but I'm much better now; I'm much freer."

And then, strangely from the mouth of an

A turned and carved vase in ash, the grain filled with gold powder

Further info For more info on segmented work,

see the website of Bryan's mentor/ teacher by books, Dennis Keeling: www.dkeeling.com

A few other useful links:

bryan@combewalks.com www.northdevonwoodturners.org.uk www.combewalks.com www.exmoorwalkingfestival.co.uk www.visit-exmoor.co.uk

easy-going, friendly, chuckly sort of bloke: "many people are complete idiots. I mean it, and I let them know." I pull him up on this. 'You know that's not true? We're all right from our side'. "Yes, I know, and they probably think that I'm the idiot, but they're conniving and devious and I don't see the point. It's why I became self-employed: the people above me were idiots." I point out that a streak of duplicity might well reside in him too because his Ascendant is in Gemini. He seems to know something about this but he's not letting on. "Mmm. I wish it wasn't."

He does crosswords but he doesn't do gardening or languages and he doesn't do philosophy. "I can't stand academics; Simon Schama drives me mad. What's the point of knowledge? It's irrelevant." His general knowledge is, he says, "rock bottom." He doesn't read novels, in fact he doesn't read books in general: there is enough to be going on with inside his brain without entertaining other people's worlds. The only reading he does, and I am very pleased to hear this; he tells me he does it from cover to cover, and there's a pile of them down by his chair as if to prove it (and, you see, nothing has changed over half a century or more) is of woodworking magazines.

Centrefold



AAW 'Excellence Award' winners

We look at the 10 deservedly-awarded turned pieces from the 2015 AAW International Symposium



'Bryce Canyon II' in Russian olive burl, by American turner Kip Christensen, 125 × 150mm The American Association of Woodturners' (AAW) 2015 International Symposium was held in June in Pittsburgh, Pennsylvania, USA. Attendees were invited to bring and display up to three pieces of (their own) turned work in the Symposium's Instant Gallery (a pop-up gallery). The enormous open member show featured more than 1,300 art works and crafts in wood by woodturners of all skill levels.

Members of the AAW's Professional Outreach Program (POP), which promotes high standards of professionalism in woodturning, selected a total of 10 exceptional pieces to receive 2015 'Excellence Awards'. We share those pieces with you here... an

AAW International Symposium highlights





'Untitled' in dyed poplar veneer, by Tiberio Yepes, 63 × 356 × 305mm



'Old Teapot' in poplar burl, by French turner Hubert Landri, 138 × 138mm

American Association of Woodturners (AAW)

Based in Minnesota, AAW is a nonprofit organisation dedicated to advancing the art and craft of woodturning worldwide by providing opportunities for education, information, and organisation to those interested in turning wood. Established in 1986, AAW currently has more than 15,000 members and a network of over 350 local chapters globally representing professionals, amateurs, gallery owners, collectors and wood/tool suppliers. AAW's journal, *American Woodturner* is the foremost publication on the art and craft of woodturning in the world. For more info, see **www.woodturner.org**



'Passion Flower' – a pyrographed piece in Norfolk island pine by Hawaii-based turner John Mydock, 125 × 406mm

Centrefold



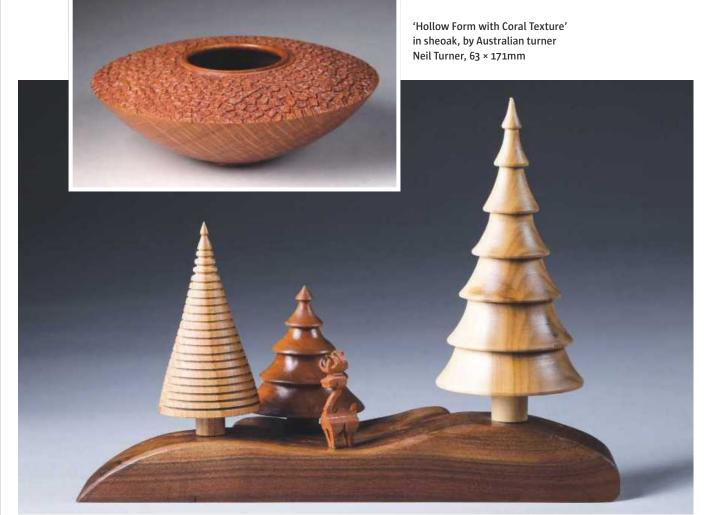
'Pebble Form' in sycamore by American turner Max Brosi, 254 × 150mm



Also winning in the College Division was Riley Stensland with 'Modern Man', made using spalted maple, copper, matches and striking paper, 406 × 75mm



Kailee Bosch won within the College Division with 'Connection' a sculptural piece in Russian olive and steel, 508 × 255 × 180mm



Another winner in the Youth Division was Parker Duxbury from Ohio with 'Scene: Deer Amidst the Trees', made in walnut, poplar, cherry and maple, 200 × 279 × 125mm

WE'VE GOT CHRISTMAS Sorted! Have you?

Avoid the long queues and treat your loved one with a gift subscription to their favourite magazine. You get to save money, and they get their magazine delivered direct to their door! You could even treat yourself... Don't miss out - subscribe today!



SUBSCRIBE SECURELY ONLINE: www.mymagazineoffers.co.uk/X310 CALL: 0844 243 9023 AND QUOTE X310 BY POST: PLEASE COMPLETE THE FORM AND POST IT TO THE ADDRESS PROVIDED. QUOTE REF: X310

YOUR DETAILS: (This section must be completed) GIFT RECIPIENT (Complete Your details' first) PAYMENT DETAILS make cheques payable to MyTimeMadia Lid and write code X310 and magazine title on Mr/Mrs/Miss/Ms Name Mr/Mrs/Miss/Ms Name the back Postal Order/Cheque Visa/Mastercard Maestro Surname Surname (Maestro) Card no: Address Address Cardholder's name: Valid from Expiry date.... Maestro issue no. Postcode Postcode Country. Country Signature Date Tel/Mob Tel/Mob SEND TO: My Time Media Ltd, 3 Queensbridge The Lakes, Northampton NN4 7BF Email. Email TERMS & CONDITIONS: Offer ends 15th December 2015. Lik Offer Only, Giff subscriptions will begin with the first available issue of 2016 and personal subscriptions with the next D.O.B. D.O.B. available issue when order is placed. For full terms & conditions visit www.mytimemedia. (Complete if gift recipient is under 18) (Complete if the subscription is for yourself) could/terms. From time to time, your chosen magazine & MyTimeMedia Ltd may contact you regarding your subscription, or with details of its products and services. Your details will be processed in full accordance with all relevant UK and EU data protection legislation. If you DO NOT wish to be contacted by MyTimeMedia Ltd & your magazine please tick Price Magazine. Price Magazine. here: C Email C Post C Phone If you DO NOT wish to be contacted by carefully chosen and parties, please tick here.

Post
 Phone
 If you DO wish to be contacted by carefully chosen 3rd parties, please tick here:
 Email

(0)

For any of these titles *UK only offer



The North of England Woodworking & Power Tool Show



Gt Yorkshire Showground Harrogate (HG2 8QZ)

20	November	2015	10am - 5pm		
21	November	2015	10am - 5pm		
22	November	2015	10am - 4pm		
	Promotions w.skpromotions.		01474 536535		
Tele	ke life easy and phone 01749 813 Old Sun, Crete Hall R	899 or writ	te to SK Promotions,		
Nar	Name:				
Ado	Address:				
I					
Pos	t Code:				
No	No of adult tickets £10.00 @ £8.50				
No	No of concession tickets £9.00 @ £7.50				
Che	Cheque / P.O. to SK Promotions £				
For or p	PLEASE ENCLOSE A STAMPED ADDRESSED ENVELOPE. For show details either visit www.skpromotions.co.uk or phone 01474 536535.				
	uld you not wish to re our woodworking show				

Woodwork foundations



A view of Yandles and Sons Ltd of Martock's extensive timber yard Photographs courtesy of Yandles and Sons Ltd

Timber – a very complex subject!

In the last of this series, **Michael Huntley** explores the complexities of timber and all the considerations that need to be taken into account when choosing the best piece to use. There's a lot to learn so best put the kettle on!

ne of the most commonly asked questions is "what's the best timber?" There is something missing from that sentence. As it stands, the question shows that the questioner does not understand the subject. What is missing is the little word 'for'. When choosing timber you have to consider for what purpose the item is being made. Then, using your understanding of the characteristics of different timbers, you will be able to choose a species.

Most decisions by amateurs these days are made on the basis of what is available, not what they actually need. In a sense, this article, the last in the series, should have been first! But a long technical article on timber might have been off-putting to the beginner, so let's consider the decision process.

Do you already own the timber or will you be buying it in?

There are several issues here. Are you in the situation that you have timber in stock and are looking for something to make with it; or do you have a project in mind and are hoping that you have suitable timber? This latter situation

may well lead to a trip to the timber yard because you cannot find anything suitable in your stack and you need to search through a better range of timbers at the yard. The reason that I mention this problem is that many projects are made with unsuitable timber because that is what is handy. So we need to consider what makes timber unsuitable. Over the next few pages I've listed some of the factors that you need to consider. However, for a comprehensive list you need a good timber book such as R. Bruce Hoadley's Understanding Wood and a timber dictionary such as World Woods by William A Lincoln.

Woodwork foundations



▲ Pic.1 Not all plywood is the same – look for thin lamins with no voids. The third and fourth ones down are the best quality. Decorative veneer facings are available at an extra cost



▲ Pic.2 Home-made bending test. Load a sample with a heavy weight and see how far apart the supports need to be. But if you don't want your shelves to bend over the years, then allow a healthy safety factor!

Are rainforest timbers excluded from the choice?

There are systems for ensuring that rainforest timbers are managed sustainably, benefit the local community and are accredited. The FSC (Forest Stewardship Council) is one. Some timber suppliers have a 'Responsible Purchasing Policy'. Check your supplier for these statements and accreditations and if satisfied, then you can buy tropical timber with confidence. Be aware, though, that the use of some tropical timbers can result in skin or nose irritation. Always wear a dust mask!

While on the subject of sustainability, don't forget your local wood recycling centre – these often have supplies of interesting timbers. www.recyclenow.com will tell you where your nearest centre is.

Do you need man-made boards?

If your project needs large flat surfaces, then you may choose to use man-made boards because wide boards of solid timber are not easily available. Good quality plywood is the best choice, but look for the accreditation mark. MDF produces fine dust when worked and there are long-term issues about offgassing. My personal choice is not to work with MDF because I like the appearance of a solid wood surface even if it has to be a plywood surface, and I want to reduce the amount of time that I have to spend wearing a dust mask.

Loading of the object

This is normally dealt with by altering crosssectional size, but if there are variable loads, then you may want to choose species that are resistant to splitting or have specific interlocking grain patterns. An extreme example of a variable load is the hub of a wooden wheel, but I have recently come across this same situation for the hub of an octagonal timber-framed building that I'm working on. Cross-laminating is another form of structurally useful physical layout, similar to interlocking

Will the object be indoors or outdoors?

This is a pretty major question. If outdoors, then you need to use a timber that is fairly water- and rot-resistant. The most obvious of these are rainforest timbers, but you may want to avoid these on ethical grounds. If you are going for native species, then the most obvious answer is oak, although sweet chestnut for post and rail construction is an often overlooked timber.

> Pic.3 Most wood floats, but lignum vitae doesn't. When cricket bails blow off the stumps in heavy wind, lignum bails can be used



Understanding and choosing timber

growth patterns. In general, slow growing, dense timbers are stronger than faster growing, less dense timber – see below.

Strength

There are various ways of measuring the strength of timber and data is available in *World Woods*. Suffice it to say, hickory is one of the higher ones and lime is one of the lower ones. Apart from the obvious need for strength to hold a weight, there is also the propensity to bruise that needs to be taken into account. You don't want an easily bruised timber for a table top. For those wanting more detailed information on the characteristic values for a number of timbers, see *The Strength Properties of Timber*, by Gwendoline M. Lavers.

Weight

It may well be that your ideal timber is just too heavy for the job, so there has to be a trade off between strength and weight. Heavy timbers can also be very exhausting to work and they may well blunt your tools. www.datadryad. org/repo/handle/10255/dryad.235 gives densities of timbers and other interesting information.

Insect damage

Some timbers are resistant to insects, whereas some attract insects. Wood-boring insects like sapwood. For various reasons, it is best to avoid using sapwood if you can.

Bending

There are also tables available to say which timber is best for steam-bending. If you want to avoid bending, then search for the 'modulus of elasticity' of timbers, although this may well be covered in the strength tables. There are also tables that show the changes in dimension for various timbers.

▼Pic.5 The top piece of spalted beech has shrunk in its width leaving a gap at the lower shoulders after this joint was cut. Interestingly, the joint becomes tight during wet weather. It is very educational to cut a joint like this and leave it in the workshop to observe how often the timber expands and contracts with the weather



▶ Pic.4 Hopefully your timber isn't as severely insect damaged as this piece of lime!

Taking glue

This is an often overlooked point. Some timbers have an oily surface and need special preparation before gluing. Washing the glue surfaces with acetone first will de-grease it.

Taking surface finishes

In the same way, some timber surfaces don't take certain polishes well. For example, the open grain of oak means that it doesn't take French polish well. That doesn't mean that you cannot polish oak, but it would be more time consuming than polishing walnut, for instance.

Appearance

I have put appearance last in my list of characteristics, but of course many people

Woodwork foundations



Pic.6 A steam box at the Windsor Workshop being opened and... Photographs courtesy of www.thewindsorworkshop.co.uk



A Pic.7 ... the steam-bent hoop being allowed to set in the shaped former

would think that visual appearance should be first. The trouble is that a beautiful timber may be hard to work, difficult to polish, easily split and very expensive. For those reasons, although you love the timber, you may choose to use it for something different or use it as a veneer on a more amenable substrate.

Physical characteristics of timber

Sometimes I wish I hadn't started this article there is just too much to say! However, these are the basic structures of timber. If grown in Europe, it will be either hardwood or softwood. In general, hardwood loses its leaves in winter and softwood doesn't. Softwood also has resin canals, whereas hardwood doesn't. Tropical timbers are different again. If you cut a section through the tree you will see growth rings and bark. The darker growth rings are the heartwood; the pale area just below the bark is the sapwood. If you cut a tree longitudinally. then you will see growth rings on the edge. This longitudinal section shows the grain. The growth rings are formed of hollow vessels that run from the base of the tree right to the tips of the branches. There are other structures in the timber, such as rays, that give variation to the appearance of the grain. The overall appearance of the grain is known as figure. Figure is very important in determining the value of timber.

Trees have branches, and in the sawn timber the place where branches join the trunk are known as knots. Knots can be decorative as well as annoying. Timber can also have marks, which are the response to disease, and these can also be decorative. Some of these are known as burrs or burls.

Water content

Living trees have a lot of water in them. When a tree is cut down and converted into planks, it must be stacked and left so that air can pass between the boards, and the water dry out. This is known as seasoning. Timber that is unseasoned is known as green timber. The subject is very complex; it takes years to understand timber so a few sentences here are not going to suffice! Read the books that I have mentioned. The main point that you need to know is that timber will continue to take in and let out moisture vapour for years after it is felled and seasoned. As this happens, the timber will expand and contract. Your use of the timber must take these changes into account. A guide to timber and moisture can be found in *How to Season and Dry Your Own* Wood, by Alan Holtham, published by GMC Publications. But be aware that NOTHING you can do will prevent the timber from moving! I hope this series has been helpful.

NEXT MONTH

Michael is back with a brand new series on Japanese joinery



Quality • Innovation • Performance

Beyond all expectation

P1CC

Revolutionary Precision Jigsaw

- Includes tilting base & 0.8m rail
- FREE pack of blades worth £66.00



MT55CC Precision Plunge Saw System With unique scoring function

Includes 2 guide rails
FREE blade worth £70.20

£639.95 Inc VAT



A10M 10.8v Cordless Drill

Includes 90° angle attachment
FREE Quick release chuck worth £24.20





Call 01484 400488 for more information Offer ends 30th December 2015

NMATOOLS.CO.UK info@nmauk.com

Project

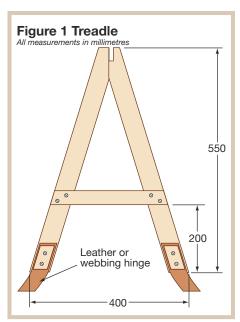
Make your own mini pole-lathe

Alan Turner shows you how to build a small version of the traditional pole-lathe that can even be used in a city garden

ole-lathes have been around for centuries and only went out of commercial production around 40 years ago. Today, they are being used by craft workers in forests (see our feature on page 60) and by an increasing number of hobbyists who enjoy the hands-on experience of this ancient tool. It's certainly a cheap, safe way to enjoy the pleasures of woodturning.

I built my own pole-lathe about four years ago and have spent many happy hours turning green wood into usable items, including a couple of Windsor chairs.

The idea of making a smaller version came from a picture of a medieval lathe operated in the sitting position and driven by a bow. This, of course, only leaves one hand to work the



Tools

All parts of the lathe are made of oak but you could use offcuts of beech or ash. The A-frame is made of pine

cutting tool. I wondered if it was possible to make a mini lathe that could be driven by leg power

in the sitting position, leaving both hands free.

Many hobbyists don't have room for the 4-5m pole originally used on these lathes and have to use car roof rack bungies to drive their lathes. These can be attached to the workshop ceiling and provide the spring return for the treadle. In my mini version, the spring return comes from rubber stretched across the framework about 300mm above the workpiece. It's cheap and simple to build and offers the chance for a complete novice to have a go at turning. As the power all comes directly from the operator, it's also safe for children to use, under supervision.

Lathe bed

The lathe bed is simple to build but you must make sure all the screw holes are countersunk. Also, the holes drilled at the right-hand end of the bed to fix the spacer and those at the left poppet should be diagonally opposed.

Poppets

To make the poppets you will need 12mm threaded bar and bolts. On the left-hand poppet, drill a 10mm diameter hole, 20mm deep and 25mm down from the top. It should be perfectly horizontal to the lathe bed. Turn the threaded bar into this hole to cut the threads in the timber. Remove the bar and grind one end to a point. Cut to a length of about 35mm and screw into the hole until tight. The left poppet can now be screwed in place on the lathe bed.



The right poppet is also drilled with a 10m bit, 25mm down but this time it is drilled all the way through, see **Figure 2**.

The threaded bar for the right poppet will also need grinding to a point and needs a crank on the other end. I used a bolt with a hooked end but you could heat some straight bar and bend this to a crank shape. The bar needs to have around 60mm of usable thread. This can now be threaded into the hole in the poppet. A drop of oil may ease the thread cutting process and make the thread easier to turn in use. If it's stiff, the thread can be lightly sanded to make it turn easily. This poppet must be easy to turn.

When cutting the slot at the bottom, drill the lower hole at a slight angle to correspond with the wedge taper. Note that the top of the slot will be just above the base of the bed, so that the wedge will lock the poppet in place.

The 60 × 20 × 20mm pieces can now be screwed centrally onto the 8mm deep slots and the accuracy of the centres can be checked by moving the right-hand poppet across to meet the fixed left poppet, just like the drive centres of a powered metal lathe.

Wedge

Cut the wedge from a $100 \times 30 \times 8$ mm piece and round off the bottom edge of the taper to correspond with the round edge at the bottom of the slot.

Toolrest

On a pole-lathe, the rest usually sits up against

Mini pole-lathe

the poppets and is held at one end by a screw. Adjustment is needed for different diameter workpieces. I decided to design a toolrest that would slide across the bed and be adjustable for height and size of workpiece. Note that the gap between the two top cross pieces is 30mm, allowing the 27mm lower section of the rest to be moved into place and held by wedges. The height is adjusted by using a spacer underneath.

The $660 \times 20 \times 20$ mm uprights can be screwed into position at the sides of the lathe bed and the cross piece added. The rubber is now stretched across the hooks placed about 100mm down.

The rubber

Raid the sewing box for elastic or use a bungie or part of a bike tyre inner tube for this part, but remember that the tension determines the pressure needed to drive the lathe as well as the return action. On my machine, I used 1.2m of model aircraft rubber. The ends were knotted together and the length halved and fastened by hooks.

Making the A-frame

I am 1.88mm tall and when sitting with the stool level at 460mm, this frame is the ideal height. You will have to experiment to find the right size for you.



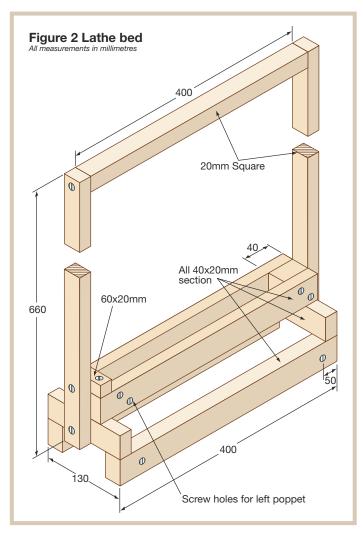
Pic.1 View of the lathe with workpiece ready for turning

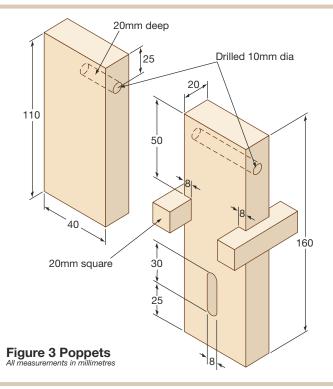
If the A-frame is made to a height of 1,100mm, it can be used standing up. In this case, the treadle would be pivoted from a base measuring 500mm square, which the operator stands on when using the lathe.

The bed sits astride the A-frame and can be screwed to it in a position that allows the cord to run freely at the left-hand side of the workpiece. The distance moved by the treadle determines the number of revolutions for every downward stroke. As this lathe is operated in the sitting position, there will be less treadle movement than with a normal pole-lathe. It's a simple job to lengthen the treadle and adjust it to suit the user. Strips of leather could be used to make the hinges of the treadle, but I used seat webbing in a double layer. The material you choose must be trapped onto the frame with short pieces of timber screwed over the top and the same on the rear stretcher. To check it works smoothly, sit on the lathe and find the best fixing position. Use short strips screwed around the shape of the heel to prevent your foot slipping.

Driving cord

I used 2m of 3mm cord fastened to the end of the treadle arm. It is then wrapped twice around the workpiece and tied onto the rubber so that it is under slight tension.

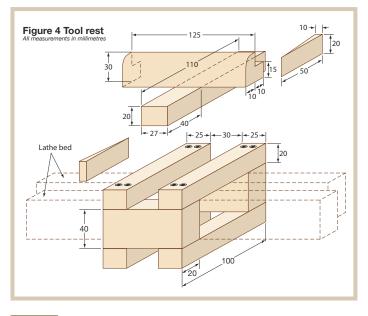




Making your blanks

Blanks for a pole-lathe are usually made by cleaning freshly cut green ash or beech into workable-sized pieces. These are held in a shaving horse and shaped into a cylinder using a drawknife. For this mini lathe, it's easier to use short lengths of straight timber up to 50mm diameter and 200mm long. One advantage is that the central pith of a small section of log will often mark the centre of the work for setting in the lathe. If you want to use seasoned timber, always cut off the corners to form octagonal sections and punch the centre points in the ends to a depth of about 5mm

Project



Tip

If space is tight, make the A-frame with bolts and wing-nuts, so that it can be taken apart and stored away in the workshop ready for next summer

5 steps to green turning...

Step 1 Move the right-hand poppet across the lathe bed until the distance between centres is around 6mm greater than the length of the blank. Lock it in place by tapping the wedge with a mallet.

Step 2 Wrap the drive cord twice around the blank and proceed to push onto the centre of the left poppet.

Step 3 Turn the crank on the right poppet until it holds the work firmly but doesn't restrict the turning action. Put a spot of oil on both centres, treadle a few times and then re-tighten the crank.

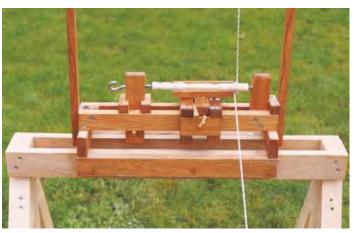
Step 4 The blank should rotate towards you as you push on the treadle and spring back as you release it. The drive cord should run smoothly on the work and not cross over itself. You can

adjust if needed by moving the attachment point of the cord to the rubber. When you tension the rubber, it should still allow the treadle to move easily.

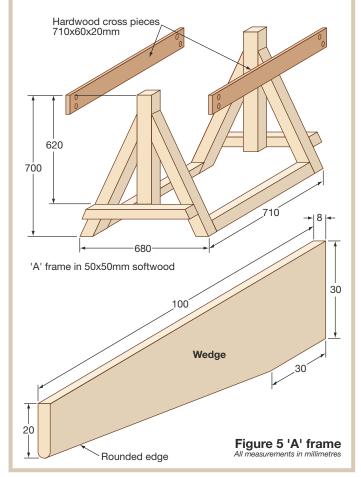
Step 5 Rest your gouge on the top of the rest and cut as the wood rotates towards you. The gouge is then pulled back slightly as the treadle returns. You soon get used to the action as you practice. Your right foot is used to provide stability by resting on the frame's rear stretcher.

Gouges

A 25mm or wider roughing gouge is essential to turn the blank into a cylinder. I use woodcarving gouges of 5 and 10mm for the shaping and a 50mm firmer chisel for smoothing.



▲ Pic.2 Pieces up to about 50mm diameter can be turned on this size of lathe



I did try working my mini pole-lathe with a bow but found that it must have been a simple curved stick with cord held loosely between the ends. The concave arch is held facing downwards and the cord becomes taut when wrapped twice around the workpiece. It's surprising how much drive is transferred to the work with minimal effort but you need a lot of practice to use the gouge skilfully with only one hand. Whether you decide to use a bow or the treadle shown here, I hope you enjoy making and using your own mini pole-lathe – happy turning!

MINI POLE-LATHE CUTTING LIST

0	C:	11.00
Quantity	Size	Use
2	710 × 60 × 20	For top of A-frame
4	400 × 40 × 20	For lathe bed
2	130 × 40 × 20	For lathe bed
1	40 × 40 × 20	Spacer for lathe bed
1	110 × 40 × 20	Left poppet
1	160 × 40 × 20	Right poppet
3	60 × 20 × 20	For right poppet and lathe bed
4	100 × 25 × 20	Toolrest
2	40 × 20 × 20	Toolrest
1	110 × 27 × 20	Toolrest
1	125 × 30 × 20	Toolrest
2	50 × 20 × 10	Wedges for toolrest
2	660 × 20 × 20	Uprights for rubber drive
1	400 × 20 × 20	Cross piece for uprights
A-frame: Around 7m of 50mm square section softwood		

A-frame: Around 7m of 50mm square section softwood **Treadle:** Around 2m of 50mm square timber

Also needed: 2 x 1in cup hooks; 1.2m of model aircraft rubber or similar; 2m of 3mm drive cord; 2 x 12mm bolts or threaded bar; leather or webbing for pivot; No.8 x 2½in screws; No.8 x 1½in screws. All measurements in millimetres



Special show deals will be available in store on the day and 28th & 29th Nov during normal opening hours



Tel: 01264 811070

The Old Stables, Chilbolton Down Farm, Stockbridge, Hampshire SO20 6BU

email: admin@johndaviswoodturning.com

Record

Shop Open: Mon - Sat 10am - 5pm, Sun 10am - 2pm

www.johndaviswoodturning.com

Profile

he continuing popularity of green woodworking schools is not surprising. It's a useful way to have a go at pole-lathe turning, which could be seen as woodwork at it's most fundamental. People get to spend a few days living in a woodland, the gear is set up ready for them, the expertise is on hand to guide them through and they come out with a funky piece of hand-turned craft. Many of the students, I gather, return to build on the skills they have learned as well as to sop up some more of that atmosphere. The classes are jolly affairs; people enjoy spending time 'bodging' in the woods.

Clissett Wood

For 20 years Clissett Wood in Herefordshire has been a prominent green woodworking site. Trundle up a dirt track running off a narrow country lane and you discover an area where a natty stretched canvas canopy covers the work area, letting the light in nicely but allowing work in all weathers. You are surrounded by lush green wood complete with wood-stove and earthy comforts.

The wood is now under the proprietorship of Gudrun Leitz, who among her many accomplishments, back in the '90s took on a contract to supply 500 hefty turned oak balusters for the rebuilding of Shakespeare's Globe Theatre, by Southwark Bridge in London. It was a studied reproduction of the Elizabethan building complete with amphitheatre surrounded by tiers of oak galleries, greatly enhanced by the woodturner's art. I was lucky enough to meet her again lately after several years and enjoy a demonstration of the process. She turned a classic Windsor chair pattern piece from log to spindle, all by hand, swiftly, and without a machine in sight.

Queense the Woods and a machine in sign.

Barrie Scott ventures into the historic Clissett Wood to meet pole-lathe turner Gudrun Leitz, who shows him how to turn a spindle in less than 30 minutes

Gudrun Leitz and the pole-lathe



A selection of homemade shavehorses

The side axe



A cunning device for lifting a log The weight makes it lock on

Cleaving with axe and beetle





Material being prepared on a backwards sawhorse



Reduced to clean timber

Removing timber to just above finished size



Woodland pedigree

The woodland has a considerable pedigree being situated close by the workshop of 19thcentury chairmaker Philip Clissett and was named accordingly. Clissett sourced his supplies of elm, ash and cherry locally and spent 72 years cheerfully improving his craftsmanship. About 50 years into his trade he was 'discovered' by Ernest Gimson, a Cotswold furniture designer associated with the Arts & Crafts movement. He was impressed at his working in the old tradition with pole-lathe and cleaving brake, not 'demeaned by Victorian barbarism' in the form of modern industrial practices and for a time became a student of Clissett's. The speed and efficiency of his work, and the 'rightness' of the chairs, in Gimson's view, earned him national acclaim and much better business. Gimson recorded that Clissett would sing as he worked and could often be

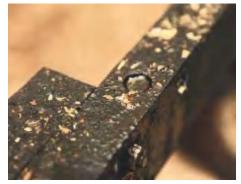


Drawkniving on the shavehorse to get it as near round as possible, so it is ready to turn

heard calling out: "If you're not singing, you're not happy." Perhaps this is an element of the spirit that brings students back to the simple but ingenious process of pole-lathing? Modern joiners may whistle while they work at a planer, but they can't hear themselves!

Swift spindles

Using a cunning device, a self-locking steel wood-claw (see photo above), Gudrun hoiked a log of wild cherry up on her stick-built saw horse. It had been felled in February, eight months before and was cleft in half ready. Green woodworkers' use of cleft timber exploits the natural strength of trees' fibres. It also offers a different take on the use of grain patterns. She sawed off a length around 400mm and set it on a stump for some business with the side axe, which offers more control than the standard axe for cleaving.



A handy drill hole for a reservoir of walnut oil for lubricating the end-grain, which turn easily in the centre rods

The mallet is traditionally known as a beetle. The weighty version favoured by the green woodworker for whacking against an axehead is made from a log, usually ash, measuring 75-100mm-thick, simply pared down to create a handle. As well as axes, cleaving can be done with a steel wedge and hammer or a froe, depending on the length of the timber to be cleft. The process mostly involves hitting steel with wood and steel always wins!

Compared to modern methods, considering the time taken to buy timber, set up machines, etc., cleaving is faster, carbon neutral and doesn't wreck ears or nostrils. In this fashion, Gudrun cleaved a quarter log, removed bark and pith, a few corners and a stick of clean timber was soon ready for the drawknife.

The shaving horse is a basic but evolved workbench for drawknife work. Your body weight holds it steady and your foot rests

Profile



Applying walnut oil



The joy of turning



Oak spindles in Ledbury Theatre, Gudrun's work – replicas of those she made for Shakespeare's Globe Theatre

on a simple quick-release clamping lever, so you can efficiently shave and manoeuvre the workpiece ready for the lathe.

Many will have seen the pole-lathe in action at wood shows. It is said that operating the lathe by muscle rather than electric gives greater control and sensitivity over the work and so has technical advantages. To stand and watch it in the hands of an experienced operator is always a fascinating and calming experience. So concentration is on creating the desired shape and, it seemed, enjoying the action and sound of the device. It is silent other than the rasping of chisel against wood, which as Gudrun pointed out, changes when the spindle becomes completely round.

An essential trick is to dab a little oil on the end-grain where the wood attaches to the centre rods that hold it in position while it turns, which allows a smooth movement. Gudrun likes walnut oil. The whole process took barely half an hour, inclusive of chatting time.



Wonderful shavings!



An interesting trick. A handful of shavings is used to burnish and smooth the finished piece



19th-century chairmaker, Philip Clissett

Get pole-lathing!

Many of us enjoy the rapid production potential of machine power but were possibly originally attracted to woodwork to enjoy the action of blade against grain. The machine route, with dust extractors, goggles and ear protectors, if you're not careful, can become like factory work, whereas pole-lathing is the complete opposite. If you're lucky enough to work near your source of material, a woodland or coppice, then the process is natural, harmonious and the earthy products a pleasing million miles from the look of the plastic age.

It was around the turn of the century when I last met Gudrun at Clissett Wood. When she told me about her work at the Globe, an irresistible idea light-bulbed into my head. At that time the theatre in nearby Ledbury was being rebuilt. I approached them with a proposal that they could have their own Globe feature in miniature via the very local craftswoman who had done the work.



Tools of the trade

The Queen of the Woods, in her element!





Inside the Globe Theatre, showing the oak spindles, which were lovingly made by Gudrun

By chance, the design for the building included a gallery in the entrance lobby that was going to require a balustrade. They liked the idea. It required a substantial oak trunk to be sawn up and cleft in preparation. I placed an advert in the local paper asking if anyone had an oak tree to spare and sure enough, a farmer had one lying in his field and he said he'd be happy to donate it to the community's theatre. It all happened and they're still there, looking fine, and will undoubtedly outlast the building.

Gudrun's courses include what she terms 'sculptural free-form furniture' and it's wonderful stuff! I hope to visit a class next summer and will report back then.

Further info

Dates for Gudrun's 2016 courses are due to be released this month. To find out more, see www.greenwoodwork.co.uk



Woodworking SUBSCRIPTION ORDER FORM

DIRECT DEBIT SUBSCRIPTIONS UK ONLY

Yes, I would like to subscribe to Good Woodworking Print + Digital: £10.00 every 3 months (SAVE 42% on shop price + SAVE 73% on Digital Download + FREE GIFT) Print: £8.00 every 3 months (SAVE 42% on shop price + FREE GIFT)

YOUR DETAILS MUST BE COMPLETED

Mr/Mrs/Miss/Ms	Initial	Surname
Address		
Postcode		. Country
Tel		Mobile
Email		. D.O.B

I WOULD LIKE TO SEND A GIFT TO:

Mr/Mrs/Miss/MsInitial	Surname
Address	
Postcode	Country

INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY

Originator's reference 422562	DIRECT
Name of bank	
Address of bank	
	Postcode
Account holder	
Signature	Date
Sort code Accou	nt number

Instructions to your bank or building society: Please pay MyTimeMedia Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with MyTimeMedia Ltd and if so, details will be passed electronically to my bank/building society.

Reference Number (official use only)

Please note that banks and building societies may not accept Direct Debit instructions from some types of account.

CARD PAYMENTS & OVERSEAS

EUROPE & ROW:

ROW Print: £59.00

EU Print + Digital: £67.00 EU Print: £59.00

ROW Print + Digital: £67.00

Yes, I would like to subscribe to Good Woodworking, for 1 year (13 issues) with a one-off payment

UK ONLY: Print + Digital: £45.50 (SAVE 32% on shop price + SAVE 73% on Digital + FREE GIFT)

Print: £37.50 (SAVE 32% on shop price + FREE GIFT)

PAYMENT DETAILS

Postal Order/Cheque Visa/MasterCard Maestro

Please make cheques payable to MyTimeMedia Ltd and write code X326 on the back

Cardinolder 3 Harrie		
Card no:		(Maestro)
Valid from	. Expiry date	. Maestro issue no
Signature		Date

TERMS & CONDITIONS: Offer ends 4th December 2015. MyTimeMedia Ltd & Good Woodworking may contact you with information about our other products and services. If you DO NOT wish to be contacted by MyTimeMedia Ltd & Good Woodworking please tick here:
□ Email □ Post □ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: □ Email

POST THIS FORM TO: GOOD WOODWORKING SUBSCRIPTIONS, MY TIME MEDIA LTD, 3 QUEESBRIDGE, THE LAKES, NORTHAMPTON, NN4 7BF



PRINT + DIGITAL SUBSCRIPTION

Free Bosch Jigsaw Blades Set & 7pc Holesaw Set*

13 Issues delivered to your door

Save up to 42% off the shop price

Download each new issue to your device

A 73% discount on your Digital subscription

Access your subscription on multiple devices

Access to the *Online Archive* dating back to March 2007



PRINT SUBSCRIPTION

Free Bosch Jigsaw Blades Set & 7pc Holesaw Set*

13 Issues delivered to your door

Save up to 42% off the shop price

SUBSCRIBE TODAY

CODE X326

CHRISTMAS OFFER

SUBSCRIPTIONS Receive a **FREE** Bosch Jigsaw Blades Set WORTH £18.00 **PLUS 7 Piece Holesaw Set*** when you subscribe today

The No.1 magazin

Uninsite

TOLE LAT Gudrun L shows #

"A great addition to your tool collection!"

> SAV 42%** ON THE SHOP PRICE & 73% ON DIGITAL

diner Bryan

rollerball pen

Bosch Jigsaw Blades Set:

BOSCH

Part of the Bosch robust accessories range this 10-piece set is designed with a tougher, shock-absorbing casing for more on-the-job protection and is suitable for different woods providing different finishes.

The set includes:

OBUST

- Clean for wood: T101AO, T101B, T101BR
- Clean for hardwood: T101AOF. T101BF, T101BRF
- Speed for wood: T244D, T144D
- Speed for hardwood: T144DF
- Precision for wood: T144DP

Bosch 7-piece Holesaw Set:

ion course; Michael Huntley fal

abund the House: Phil Davy makes a rustic garden orth Make your own mini version of a traditional pole-lathe

OVICE

This is a great set of Bosch hole cutters and can be used in cutting diameters from 26 mm to 64 mm in wood, plasterboard and building boards. 7 hole cutters - Diameter 26/32/39/45/51/58/64 mm.

GES OF TOP TURNING

NOVA Comet II lathe,

TERMS & CONDITIONS: Offer ends 4th December 2015. *Gift for UK subscribers only, while stocks last. When you subscribe by Direct Debit. Please see www.mvti edia.co.uk for full terms & conditions

SUBSCRIBE SECURELY ONLINE (h) www.getwoodworking.com/subscribe



0844 243 9023 Lines open Mon - Fri - 8am - 8.00pm GMT & Sat - 9.30am - 3.30pm GMT

UK Calls costs 7p per minute plus your phone company's access charge. Overseas calls will cost more



Handy filler-tube storage solution

Steve's new storage solution is made using old gutter and downpipe offcuts





Hi GW.

I had some builders doing some work at our house, installing a new double glazed window for the garage and a new gutter. The old gutter and downpipes (square plastic) were sitting ready to be taken to the dump. I was busy sorting out some tubes of filler and silicone I keep in an old plastic bin when I had a Eureka! moment.

I cut the old downpipes into 200mm lengths, glued them together 75mm wide × 100mm high with a hot glue gun and also glued a piece of plastic conduit under the front edge to create tilt. Now all my fillers, etc. are neat and tidy and don't roll all over the place. I hope this is useful to fellow GW readers.

Recycle-mad Steve Vanderzee, from Sunderland

What a great little tip for fellow readers, Steve! I'm really into my recycling and re-using odd bits and pieces that would otherwise find themselves into the bin. Remember, if anyone else has any nifty tricks up their sleeves, do let me know! **Tegan Foley**





Andy knocked up these great pallet chairs at the recent D&M Tool Show

Andy's pallet chairs

Demoing at any show is always a difficult thing to judge - you want to try and get people interested, and as long as it's something that is achievable and easy enough, it normally gets a good reaction.

Andy King recently knocked up a few chairs using old pallets for a trade day event at a friend's tool shop, so it made sense to do the same at last month's D&M Tool Show when Makita asked if he could do some demo work for them.

The chair requires minimal tools: a chop saw, battery drill, jigsaw and a small router with a roundover bit with all the pieces being secured with screws. "I was amazed at how well received they were with countless people asking if they were for sale, if I had the plans available and when it was going in the magazine as a project! I think every single chair I've made is different; some having fan backs, others having curved backs and curved seats and I tend to make them up as I go along, so any plans are in my head – I guess I could put things down on paper and even do a simple project for the magazine if there's enough interest," Andy told us. "I might have to go for a better timber next time, though – I thought I'd use a bit of PSE timber for the D&M ones and it wasn't the best to say the least - I may go back to pallets..."

Stay tuned for Andy's chair project and in the meantime, take a look at the pics here. I love the mini version with the heart cut in the back – very cute!

Tegan Foley

WRITE & WIN!

We always love hearing about your projects, ideas, hints and tips, and/or like to receive feedback about *GW*'s features, so do



drop us a line – you never know, you might win our great Letter of the Month prize, currently a Trend Snappy Colour Ring bit set. Write to the address on the left for a chance to enhance your marking capability with this versatile workshop aid

Getting stroppy

Dear Tegan,

Over my years as a hobby woodworker I have read everything I could on how to sharpen my chisels and plane blades. but nobody ever tells vou what it took a course of woodcarving lessons for me to discover: if you hone your tools on a leather strop every time you pick them up, you don't need to go through the sharpening palaver so often. So now I keep a patch of leather that I occasionally charge with stropping compound on the door of my workshop, and whenever I pick up a chisel, I run it briskly over the leather. The same with my plane blades. My edge



Jeremy demonstrating his method for keeping edge tools razor-sharp

tools are now razor-sharp every time I use them. Jeremy Colman, by email

Many thanks for the great tip! No excuse for dull chisel edges now! Tegan Foley

Far Eastern philosophy

Sculptural woodturner Mark Sanger tells us that this stunning piece is part of an ongoing series titled 'Impermanence'. These pieces are inspired by the Far Eastern philosophy and the belief that all things are impermanent and come to an end no matter how hard we try to hold onto them. This notion is represented here in the form of a discarded vessel, which is textured and coloured to give the appearance of decaying metal, which has undergone neglect and natural erosion.

The main form was rough turned over-size using unseasoned sycamore, which was then left to season for around six months, after which a sycamore lid was turned to a good fit. The piece was then textured using a pyrography unit together with various shaped wires that allow Mark to recreate the effect of surface erosion.



'Impermanence 2' by Mark Sanger, made using textured and coloured sycamore Photograph courtesy of Mark Sanger

Colouring was applied using spirit stains, metal foils, ageing fluids, coloured wax and acrylic paints. The finial is made from a small section of bamboo and an oak base was heavily scorched and textured prior to sealing.

If you'd like to find out more about Mark's work and his courses, see his website: www.marksanger.co.uk. *GW* in conversation with sculptural woodturner Mark Sanger





LIMITED TIME ONLY* ERYTHING MUST GO – GET THESE



> WORLD WAR HEROES REMEMBERED > FIGHTER COMMAND'S ONLY

VICTORIA CROSS > PUBLISHED 2015

NOW £2.99 (RRP £4.99)



HISTORICAL TRAVEL GUIDE > WHERE TO STAY & WHAT TO SEE > SWORD & JUNO BEACHES > PUBLISHED 2014

)

NOW £2.99 (RRP £6.99)



> THE NTET MOVEMENT > ROAD LOCOMOTIVES > STEAM ROLLERS, CARS & LORRIES > PUBLISHED 2014

NOW £2.99 (RRP £6.99)



> RAILWAYS ON THE HOME FRONT > WORLD WAR II LOCOMOTIVES > STANDARD & NARROWGAUGE > PUBLISHED 2014

NOW £2.99 (RRP £6.99)



> HISTORICAL POSTCARDS

> DAZZLE SHIPS & COASTAL BOATS

> WARSHIPS MODEL BUILDS

> PUBLISHED 2014

NOW £2.99 (RRP £6.99)



> REAL-LIFE LOCOMOTIVES IN DETAIL > I OCOMOTIVE HISTORIES > MODELLING PROJECTS > PUBLISHED 2013

NOW £2.99 (RRP £9.99)



> FIGHTER PILOT PROFILES > WWI & WWII GREATEST PILOTS > AIRCRAFT SPECIFICATIONS

NOW £0.99 (RRP £6.99)

> PUBLISHED 2011

Woodworker

THEBESTOF



> FURNITURE AND CABINET MAKING

- > VINTAGE PROJECTS
- > DECADE-RELATED FEATURES > PUBLISHED 2010

NOW £0.99 (RRP £6.99)

Online: www.myhobbystore.co.uk/CLEARANCE15*

CORDENSE OF A CONTRACT OF A CO



- CROTCHET STARTERS GUIDE
- > CUTE, CROCHETED CHARACTERS > PERFECT GIFTS FOR EVERYONE
- > PUBLISHED 2015

NOW £2.99 (RRP £4.99)



- > FUN PURSES & CLUTCHES
- > TOTES, SHOPPERS & HANDBAGS
- > FREE TEMPLATES> PUBLISHED 2014

NOW £2.99 (RRP £6.99)



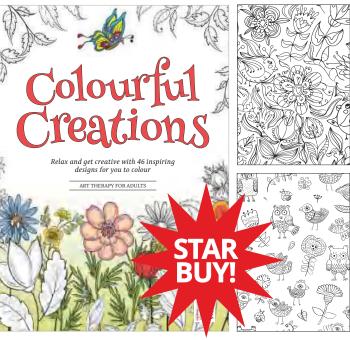
GETTING STARTED & GREAT TIPS
 KIT GUIDES & EXERCISES
 HORSEBACK HOLIDAYS
 PUBLISHED 2014

NOW £2.99 (RRP £7.99)



> GET THE BEST GARMENT SHAPES
 > FABRIC SWATCH & COLOUR GUIDE
 > FREE TEMPLATES
 > PUBLISHED 2014

NOW £2.99 (RRP £6.99)



> ZEN COLOURING-IN PATTERNS > RELAX, UNWIND & DE-STRESS > HELPS EMOTIONAL WELL-BEING > PUBLISHED 2015

NOW £2.99 (RRP £4.99)



 > PROJECTS FROM: LYNETTE ANDERSON, STUART HILLARD, KIM DIEHL, JANET BOLTON & MORE...
 > PUBLISHED 2014

NOW £2.99 (RRP £6.99)



TERMS & CONDITIONS * Please do not enter or call regarding any competition or special offers published in these titles. All offers are now invalid. Postage varies on copies bought. Subject to availability. 50% offer valid for bookazines in this range only. Limited time offer – stock clearance available until 29th January 2016. One order per person.

Limited stock so don't miss out! Everything must go! 50% off orders over £8* (T&C'S apply) Protect and enhance the natural beauty of wood with Treatex Hardwax Oil



Treatex Hardwax Oil

protects and enhances the appearance of all types of internal wood surfaces including floors, stairs, doors, furniture and worktops. Treatex Hardwax Oil is manufactured on a base of natural sustainable raw materials: jojoba oil, linseed oil, sunflower oil, beeswax, candelilla wax and carnauba wax.

- Brings out the timber grain
- Adds warmth to wood
- Easy to apply
- Quick drying
- No sanding required between coats
- Low odour
- Resistant to spills of water, wine, beer, coffee, tea and fizzy drinks
- Withstands high temperatures
- Very durable
- Easy to clean and maintain
- Spot repairable
- Safe for use on children's toys

tel: 01844 260416 www.treatex.co.uk

The Rocking Horse Shop Make a Unique Traditional Rocking Horse, 17 Superb Designs





Plans, books, DVD's, timber packs, accessories & fittings.

Carving Courses

Whether you are an experienced carver or have never carved before, you will benefit enormously from one of our courses.



www.rockinghorse.co.uk Tel: 0800 7315418 Fangfoss, YORK YO41 5JH

Ironmongery Direct

Around the OULSE



Most of us probably use a pocket calculator when estimating materials, checking dimensions and

so on. But are we in danger of forgetting our basic school arithmetic? It may not have been our favourite subject, but without it, I reckon we'd be struggling. Scribbling some calculations the other day on a scrap of wood. I temporarily forgot how to do simple long division. I got there in the end, but do we rely too heavily on technology these days? Of course, this is fantastic when it works, but when that computer or tablet dies. there's nothing more frustrating...

Phil Davy, Consultant Editor

Woodworking in the news

World wide web?

Many woodworkers with a garden workshop or garage probably accept the fact that they share it with a few uninvited visitors who make it their home. Everyone appreciates being warm and cosy, after all. However, you may have seen in the news recently that it's now possible to buy a spider-proof shed. Sealed from the outside world with silicone

joints and airtight windows, it would seem to be the perfect solution for arachnophobes keen on DIY or a spot of gardening. Apparently, the sky blue exterior colour of the shed is claimed to repel spiders, while the interior is lined with insect-repellent paper. If you're still not convinced, you can have the structure impregnated with citrus and peppermint insecticide treatment. Or even opt for a six-monthly pest test inspection

from the manufacturer, Yorkshire-based Tiger Sheds – www.tigersheds.com. Presumably, this means you still have to

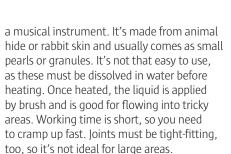
keep the windows or door shut on a fine day,

0&A

Pearls of wisdom

Q I normally use PVA glue for woodworking, but am interested to know where traditional animal glue is used. Are there any benefits in using this type of adhesive for general woodwork? M Hackett, via email

A lthough considered rather outdated compared with modern adhesives, animal, hide or Scotch glue is still used by antique furniture restorers and for veneering. It's the traditional glue used by luthiers, particularly for violin making and repair. The real advantage is that repairs are reversible, so you can separate joints on old furniture or remove the top or back on



Once, every workshop would have had a glue pot bubbling away in the corner. Electric glue pots are still available, but at a cost. A cheaper option is to soak the pearls in a small jar, which is then heated up in a pan of water. A modern liquid hide glue is made by Titebond – perfect for small repairs as it's used cold.





You can now buy a spider-proof shed, thanks to Yorkshirebased Tiger Sheds

The science behind keeping unwanted guests out

though. At nearly £2,000 for a basic 8 × 6ft shed it does seem rather steep, but it's a novel idea. And if it encourages someone to take up a hobby who would previously have avoided venturing into a shed, who are we to argue?

House and Garden

Winter project

Takes: A couple of weekends **GARDEN GATE**

Up the garden path

Phil Davy builds a low-cost gate using softwood and heavy hardware, then paints it to fit in with the great outdoors

Back in *GW*293 I explained how I'd installed a pair of oak posts at the end of my garden path. After a lengthy summer break, it was at last time to complete the project and build the gate. I chose the low-cost option of softwood rather than oak, which means you can use PAR timber if you don't have access to a planer/thicknesser.

The first stage is to measure between the existing posts. Deduct 20mm from this dimension, which allows a gap of 10mm down each edge of the gate. Always draw a full-size setting-out rod on a board for any joinery item, working from the actual finished timber sizes you will be using. As well as giving accurate joint information, this will show up any hidden problems that could surface during construction later on.

Traditional joints

Stiles, top rail and the diagonal brace finish at 95 × 45mm, while the bottom rail is 95 × 30mm. Construction is traditional, using through mortise and tenon joints, with a diagonal brace for support. As the bottom rail is thinner it has bare-faced tenons, which have only one shoulder. This is to enable the slats to run across the face of the rail. These are tongued at the upper ends and slide into a groove routed along the underside of the top rail. This edge is also rebated to give the slats

Tools

Planer/thicknesser, sliding mitre saw, jigsaw, router, sander, drill stand

something to sit against. Slats are not glued but simply nailed to the lower rail and brace. These finish at 64 × 15mm, but you could make them any width.

You can either wedge the tenons or drawbore them, which involves driving hardwood dowels (pins) right through the joints. Drawboring means you can pull the joints up together really tightly without having to rely too much on cramping pressure. Because my heavy T-bar sash cramps were not long enough for this wider gate, I bolted together two lighter cramps to extend them. Although not providing as much cramping clout, this was just enough to pinch the frame together and drive in the dowels. If you've never tried drawboring before, experiment with a flatbit and dowel first on an offcut.

It's important to cut a bevel around the end

of each dowel to enable them to be driven into one side of the mortise and out again underneath. With no bevel, the pin could bind on the tenon, which is drilled slightly offset from the mortise.

Heavy hardware

This is quite a substantial gate, so you'll need to fit heavy-duty hinges. Hook and band hinges are most suitable as they're screwed, bolted and easy to fit. These should be at least one-third the width of the gate. If the gate and posts are flush at the back, then choose cranked hinges. The hook or pin is screwed to the post with the gate wedged in the opening.

After giving the wood a good dose of clear preservative, I brushed on a couple of coats of Cuprinol Shades finish.



Ironmongery Direct

MASTERS OF OUR TRADE

✓ UK'S BIGGEST RANGE IN STOCK.
 ✓ ORDER BY 8PM. GET IT NEXT DAY!
 CATALOGUE
 © 0808 168 28 28 [↑] Ironmongery Direct.com



Measure between posts at top, middle and bottom to check accuracy. Use the shortest dimension for the gate



If using sawn timber, machine the material required for the stiles and rails. Allow 50mm extra length on each piece



Set the mortise gauge to the chisel's width or router bit diameter if using a router. Mark joints on both stiles



Cramp both stiles together to support the router. Using a 16mm bit, rout the mortises full depth from both sides



Mark out mortise and tenon joints on the stiles and rails, working from the settingout rod drawn previously



Square off the ends of the routed mortises with a corner chisel or similar. Chop down to clear any remaining waste timber



Cut tenons on both rails. Use a hand saw, bandsaw or sliding mitre saw with the blade set just above the gauged line



The upper edge of the top rail should be rounded over so water can run off it. Shape this with a plane and sanding block



Clean up the tenon cheeks with a finely-set shoulder plane. The bottom rail has bare-faced tenons



Assemble the gate dry and measure between both stiles; this will allow you to determine spacings for the front slats



Check each tenon is a sliding fit in its mortise and that each joint is square. Trim carefully where necessary



The joints are drawbored so tenon shoulders pull up tight to the rails. Drill through both stiles with a 13mm flatbit



Takes: A couple of weekends **GARDEN GATE**



Dry assemble the frame and mark dowel centres on tenons with a flatbit. Re-mark centres about 1.5mm in towards the shoulders



Check that the jigsaw baseplate and blade are square, then carefully cut around each curve on the waste side of the line



Remove the rails and drill tenons with the same bit. Brush two coats of wood preservative onto the joints



Clean up the curved ends with a sanding drum mounted in a drill stand. Alternatively, use a rasp and sanding block



Draw the radius at the upper end of each stile. Either use a pair of compasses or draw around a suitable container



Assemble the frame, using a suitable waterproof exterior glue, such as polyurethane or powdered resin



Cramp across the stiles and tap in the glued dowels. The ends should be pointed to help align the holes underneath



When the glue has dried, saw off the protruding dowels. Clean off any dried glue with a chisel



True up the front and back of the gate with a fore plane, checking for flatness with a steel straightedge



Lay the brace across the gate and mark off from the stiles. Adjust a sliding bevel to this angle and mark both ends



Saw off the excess tenons and trim flush with a bench plane. Cut off the lower horns on the stiles



Saw the support brace to fit between the rails and stiles. Trim with a plane for a snug fit if necessary

Ironmongery Direct

MASTERS OF OUR TRADE

✓ UK'S BIGGEST RANGE IN STOCK.
 ✓ ORDER BY 8PM. GET IT NEXT DAY!
 © 0808 168 28 28 ^C IronmongeryDirect.com



Notch the bevelled bottom rail square with a chisel where the brace meets. Glue and nail, pre-drilling the holes first



Each slat is tongued at one end to slide into a 7 × 7mm groove, which is routed beneath the top rail



Position cranked strap hinges on the top and bottom rails and mark the hole centres. Drill and insert 5.0mm screws



It's easier to paint both the brace and bottom rail before fitting the slats. Nail these in position but don't use glue



Fill defects with a two-part epoxy filler and sand when dry. Seal any big knots with knotting solution



Saw off the excess lower horns on both stiles. Mark the slats with a straightedge and cut them to length



Fill the remaining nail holes. Sand both sides of the gate with a belt or random orbit sander



Mark the position of the latch and screw to both gate and post. Check the gate opens without binding



Add a small decorative chamfer to the edges of slats, rails and stiles with a bearingguided router cutter



Remove all hardware from the gate and brush on a clear preservative. Apply two coats of an exterior paint



Refit the hinges to the gate. Supported between both posts, mark the pin bracket positions. Drill and screw these firmly



There's no shortage of exterior colours to choose from. Now all that remains is to reshape the post tops to match the stiles

Useful kit: Ryobi CDR180 radio

Workshop vibes

While many woodworkers are happy with their own company, I'd guess that most of us like to have something playing in the background during a workshop session. Whether it's regular news and comment or listening to your favourite music station, a radio is virtually essential for many of us. Although this battery model from Ryobi has been around for a while, it's worth checking out, especially as the festive season is almost here.

Smaller than the site radios from the likes of DeWalt or Makita, this means it's actually more portable and takes up less space on a shelf. In fact, if you're storing an extra Ryobi 18V OnePlus battery anyway, the radio will simply sit on top. Incidentally, no battery is provided here.

Tune in

It's a big improvement on the old blue model, which had no auxiliary input and was more awkward to tune, with no presets. This version enables you to listen to your favourite music from an MP3 player or smart phone. A strong elasticated band holds the device securely in a recessed compartment at the back. A short cable with mini jack is simply plugged into the headphone socket of your music player and you're almost ready to go.

First, though, you need to set up the digital clock, which is powered by two AAA batteries, accessed through a compartment at the base. The clock is independent of the OnePlus power pack, so once set there's no interruption to the cool blue display when you remove the 18V battery for recharging. In FM or MW radio mode

you need to depress the clock button to read the time, rather than the frequency, which is always displayed. When AUX is selected, the clock display remains constant.

Maximum volume

Once you've stored up to 10 FM or 10 MW stations as presets, you can use the seek buttons to scroll up or down through the frequency range. Volume control is also via a pair of push buttons. All controls are sealed, so workshop dust shouldn't be a problem. An icon flashes in the display when battery life is low and the rubberised aerial can be folded down when not needed. A recessed handle makes it easy to carry, too.

Don't expect hi-fi quality sound, though it's actually fairly

good. Speech is particularly clear for Radio 4 lovers out there, while maximum volume level is impressive, with no notable distortion when playing a variety of music. There are no EQ controls, so you can't boost the bass or cut the treble. I'd have preferred a bass booster as this is lacking at volume. Still, it's a decent sound for the workshop and perfect should you want to listen to your own tracks.

Conclusion

The CDR180 would make a great Christmas present for the woodworker who already has a workshop full of tools but would still appreciate something almost as useful.

★★★★Price: £39.99Web: www.ryobitools.eu



The radio takes a standard Ryobi 18V OnePlus battery



The digital clock is powered by two AAA batteries, accessed through a compartment at the base



The radio has a

clever recessed

compartment for

your MP3 player

The cool blue display remains constant, even when the 18V battery is removed for charging





t:01768 899895

Woodworking Courses in the beautiful Lake District

Woodwork Course 1 (Tools and Things)

A self-interest woodwork course where the aim is to give you the confidence and the knowledge to use basic hand tools and some of the more common power tools.

You will be able to pick from a list of projects before you arrive that I believe you can complete in 5 days or less so that you will go home with one of them and you can proudly say "I made that".

I cover the teaching of how to handle tools by getting you started on your project and, as you need to use a new piece of equipment, I show you how. This means that the instruction is fresh in your mind and you do the task there and then.

On all courses there will only be a maximum of 4 at a time, this will mean that I will be available when you need help and advice.

Woodwork Course 2 (Wood and Things)

This is a continuation of course 1 (tools and things) with the emphases on timber, what are acceptable defects in timber and what isn't, how do you write out a cutting list that means something to your supplier, what to look for when buying wood and what to avoid.

You will ideally have done course 1 (tools and things) or have a good working knowledge of how to use hand tools and have used hand held power tools.

The projects for you to pick from will be more complicated and will involve the use of the more sophisticated hand tools and hand held power tools and will include using some of the static power tools in the workshop. We will also be looking at buying timber, making cutting lists and drawing plans.

www.woodworkshop.co.uk

Woodwork Course 3 (Project Days)

The advanced course is rather different from the previous two.

2016 Course Dates now

To come on this course you will need to have done both the other courses and have used your skill at home on your own projects and be ready to take on something more difficult.

WoodRat Courses

This course will teach you all the principles that you need to know!

Visit our website for more information & updates on 2015/16 course information: www.woodworkshop.co.uk t: 01768 899895

e: enquiries@woodworkshop.co.uk The Wood Workshop

7-8 Redhills Business Park, Penrith, Cumbria CA11 0DT

THE UK'S PREMIER BRANDED HAND, POWER TOOLS & MACHINERY EVENT



FREE ENTRY • FREE PARKING • FREE SHOW GUIDE • FREE MASTERCLASSES LATEST PRODUCTS • EXCLUSIVE SHOW OFFERS • DEMONSTRATIONS • BIG SAVINGS



VISIT STANDS STAFFED BY THE MAJOR BRANDS INCLUDING:



THIS YEAR'S BIGGEST & BEST ANNUAL TOOL SHOW 7th-9th OCTOBER 2016 FRI-SAT 10am – 5pm • SUN 10am – 4pm KEMPTON PARK RACECOURSE • SUNBURY-ON-THAMES • TW16 5AQ D&M TOOLS, TWICKENHAM • 020 8892 3813 • WWW.DM-TOOLS.CO.UK



Getting back to (spindle) basics



New to turning or need a bit of a refresher in terms of spindle turning tools and their uses? Great news if so as **Les Thorne** gets back to basics and covers each tool in detail

once heard a woodturning club member commenting on why some demonstrators feel the need to take an audience back to basics, remarking that beads and coves just didn't interest him. That's a thought-provoking statement as there is very little woodturning that doesn't contain convex and concave shapes. Practice makes perfect is a saying that's often bandied about and obviously this is true but in turning, good practice is what's important. I like my students to produce projects while perfecting their tooling techniques rather than just creating endless shapes.

There are simple projects, such as dibbers, foot massagers and bud

vases that are not particularly taxing but do contain all the elements of the simple shapes, and also importantly, a margin for error. I see a lot of work both here and abroad which is turned very well and I am sure that the method to produce them varies hugely. I can remember seeing some fantastic work from a turner over a period of years and I always admired his form and finish. I jumped at the chance to see him demonstrate and I was absolutely amazed at how he turned; it was the polar opposite to the way in which I would have done it! I may have produced the items quicker, but they weren't necessarily better. Overleaf we'll take a look at each of the spindle turning tools.

www.getwoodworking.com Special 2015 GW299 79

The spindle roughing gouge



▲ Pic.1 Like most tools, they come in many sizes with the majority being forged tools, which can be expensive. Ideally this tool should not be used on faceplate work, such as bowls



▲ Pic.2 The tool is best sharpened using a platform to set the angle. Placing marker pen on the bevel will show if you are grinding the correct angle



▲ Pic.3 The angle is around 40° although the majority of spindle roughing gouges have an angle higher than that; this takes away the cutting effectiveness of the tool



▲ Pic.4 The tool is presented to the wood with the right hand down and the tool tucked into your body



▲ Pic.5 I like to use the tool presented at right angles and use the centre of the tool to turn away the square corners of the wood



▲ Pic.6 Using the centre for the initial cutting allows the wings of the tool to remain sharp. You can now utilise these for your finishing cuts



▲ Pic.7 The tool can be used for shaping curves but make sure the bevel remains in contact with the timber, as the tool has the tendency to run back if you go onto the edge

The skew chisel



▲ Pic.1 The skew is often seen as the bad boy of turning because it is difficult to master but well worth persevering with. There are many different types, as shown here



▲ Pic.2 My preferred skew is a 13mm version with a rolled edge; this stops it sticking on the toolrest. Sharpening it on a jig gives consistent results every time



▲ Pic.3 If you need to sharpen on a platform, then try to get your hands in a position that allows you to slide the tool sideways

Spindle basics

The skew chisel Continued



▲ Pic.4 Here I have ground off the heel of the skew; it negates the fact that the tool is hollow ground, otherwise it could mark the wood. The angle across the top is around 15°



▲ Pic.5 The tool is ground to an angle of around 20°; this will allow the tool to easily slice through the fibres of the timber



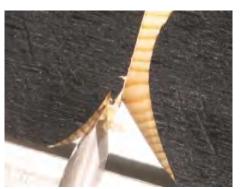
▲ Pic.6 I have sprayed a piece of pine black to make it easier to see the cuts I've made. I have marked the area that will be cut in from the square to the round



▲ Pic.7 The stance used is normal for most of the tools. The left hand is generally over the tool, which creates a tunnel for the tool to be rotated in



▲ Pic.8 The tool is presented with the left-hand bevel at right angles to the work and the longer point down. Lift the handle to slice into the wood



▲ Pic.10 You can see that I am now shaping the left-hand side into a curve with a slicing cut through the end-grain



▲ Pic.11 If the tool is used correctly, you will only cut with the point of the chisel. If you start to see dust appear on the bevel of the tool, then you are very close to having a catch



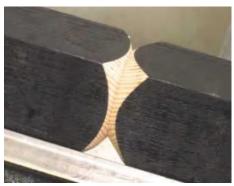
▲ Pic.13 The spindle roughing gouge will not leave a great finish, especially on pine. The skew is now presented with the centre of the tool cutting and the bevel rubbing



▲ Pic.14 Here you can see the quality of the cut off the skew compared to the spindle roughing gouge. The only time this cut won't work is on really hard, dense woods



▲ Pic.9 If you repeat the process, working the tool slightly to the right each time, you should create what's called a square pommel on the left

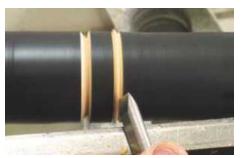


▲ Pic.12 A perfect pommel – the curve will need very little sanding as the finish off the skew is so good. The stock to the right is removed down to the round with the spindle roughing gouge



▲ Pic.15 One little tip when doing a planing cut is to control the tool by sliding your little finger along the toolrest; this will control the depth and direction of the cut

The skew chisel Continued

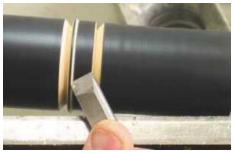


▲ Pic.16 The skew is most famously regarded as a shaping tool, especially when turning beads. Here I have cut a one-sided 'V' to mark out the position of the bead



▲ Pic.19 The perfect bead. The black line at the top shows that I haven't changed the diameter. A bead should look as if the wood has been parted and the beaded inserted

The spindle gouge



▲ Pic.17 I like to remove a little off the edge of the bead before I shape it. I position the skew more to one side and using the long point, just slice off the edge



▲ Pic.20 The round skew has a few advantages; it'll make a 'V' just as you can with the ordinary version, although I also find it easier to sharpen



▲ Pic.18 I like to turn the main shape in one pass; this will generally give you the best opportunity for a good shape. Moving your body round as the tool advances will help to avoid catches



▲ Pic.21 The other benefit of the 10mm skew is that you can cut spigots and tenons much quicker than you can with a parting tool



▶ Pic.1 Spindle gouges are available in all sorts of sizes: the far one is a forged tool whereas most modern ones are made from a round bar with a flute milled out



 Pic.2 Set the platform on the grinder so the bevel of the tool is a perfect match onto the wheel.
 I have cut away the platform on my grinder; this allows me to better position my hands



▲ Pic.3 Rotate the tool against the grindstone. As you near the side you need to slide the tool up the wheel, as shown here; this will put the required fingernail profile on the tool



▲ Pic.4 If you find sharpening difficult to master and believe it's not easy to learn, then one of the many grinding jigs available will provide you with a good repeatable shape and sharpness



▲ Pic.5 A good working angle on the spindle gouge is around 40°. Going to 35° would be better for shaping and going to 45° would be better for hollowing



▲ Pic.6 The gouge is presented to the timber with the bevel at right angles to the wood. A small forwards movement makes a cut

Spindle basics

The spindle gouge Continued



▲ Pic.7 Now the tool is making a cut on the other side, only take small amounts of material from each side until the cove gets wider



▲ Pic.8 You must keep your right hand low through the cut; this will allow the bevel to rub. If you're not getting a good finish, it's often because the tool is too horizontal



▲ Pic.9 Cutting a bead with the gouge is very similar to cutting one with a skew, but because of the angle of the bevel, this won't give you a narrow cut to the side



▲ Pic.10 To round over the end of the spindle, start with the bevel on the wood in a position where the tool will start cutting with the minimum movement required



▲ Pic.11 As the tool makes its way through the shape, you will need to lift the handle as the wood gets smaller in diameter; this will maintain the bevel in contact with the wood



▲ Pic.12 The spindle gouge excels in cleaning across end-grain. As you can see, the bevel is at the angle of the cut I want to make



▲ Pic.13 Hollowing egg cups, boxes, etc. is best done with the spindle gouge. The pencil shows the 11 o'clock position of the flute of the tool



▶ Pic.14 Once the gouge has drilled a small hole in the centre, it is pivoted out by moving the handle away from the body



▲ Pic.15 As the hole gets deeper, you will need to close the flute off slightly as you come up the side of the hollowed area. The pencil is now telling me it's at 10 o'clock



▲ Pic.16 If you decrease the depth of the cut as you get near your finished shape, you can achieve a pretty good finish. The denser the wood, the better the results you can expect

The parting tool



▲ Pic.1 Limiting yourself to one type of parting tool will not allow you to access the areas you will need to during certain projects



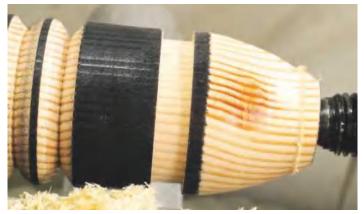
Pic.3 40° is a good angle for the chisel. You need to apply a bit of strength at the business end of this tool

Pic.4 As you present the tool to the wood, keep the handle low and lift the tool into the cut



▲ Pic.2 This is probably the easiest tool in your armoury to sharpen. Set the platform up to the angle and a slight sideways movement will sharpen the tool





▲ Pic.5 Sliding the tool along the rest and taking a small cut will leave an acceptable finish on most timbers





▲ Pic.6 Sizing cuts are generally made with a parting tool. Make sure the callipers are narrower than the tool

Pic.7 Learning to set the parting tool one-handed like this will not only help with a sizing cut but also when parting off

CONCLUSION

I hope this article has helped to either refresh your memory as far as spindle turning tools are concerned, or if you are new to turning, then I hope this has helped in familiarising you with the tools and the different methods they are used for

NEXT MONTH

Les will return to his usual project format and turns some fun Christmas decorations!

Good Woodworking

Classifieds

To advertise in BRITAINS BIGGEST SELLING woodworking magazine call David Holden on 01689 869867 or email david.holden@mytimemedia.com

TOOL RESTORING, WOOD VENEER & SPECIALIST EQUIPMENT



Stanley No.5 'before & after' photo courtesy Peter Hemsley - The ToolPost

Restore Rust Remover & Restore Rust Remover Gel Remove <u>only</u> the rust leaving sound metal unaffected. Cleans and brightens brass and nickel plating. See more stunning 'before & after' examples on our website photo galleries. Find local and international stockists on the website.

Shield Technology Limited. Unit 69, Grimsby Business Centre King Edward Street, Grimsby, DN31 3JH Tel: +44 (0)1472 360699 Fax: +44 (0)1472 324685 Email: info@shieldtechnology.co.uk www.shieldtechnology.co.uk

Distributor enquiries welcome SHIELD TECHNOLOGY Guarding Against Corrosion

"Are You Mad About <u>TOOLS</u>"?



www.madabouttools.co.uk





TEWKESBURY SAW COMPANY LTD

Spindle Moulder Cutters & Limiters Made to Order!

 Quick turnaround - Able to supply to fit most types of blocks
 Many low priced standards from stock

Tewkesbury Saw Co. Ltd. Newton Trading Est. Tewkesbury, Glos. GL20 8JG Tel: 01684 293092 Fax: 01684 850628 www.tewkesburysaw.co.uk



The Wood Veneer Hub

www.thewoodveneerhub.co.uk

We provide the highest quality:

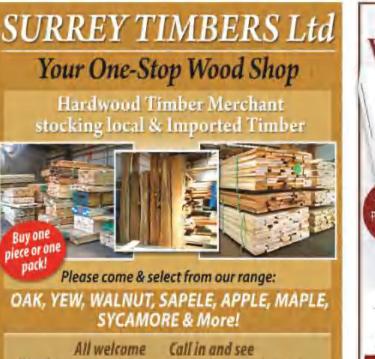
Decorative, Exotic & Burr Veneers Coloured & Smoked Veneers Constructional Veneers Peel & Stick Veneers Tools & Accessories

Visit Us: Unit 4 Eden Court, Eden Way Leighton Buzzard, Bedfordshire, LU7 4FY +44 (0) 1525 851166 sales@thewoodveneerhub.co.uk

oodworking Classifieds

To advertise in BRITAINS BIGGEST SELLING woodworking magazine call David Holden on 01689 869867 or email david.holden@mytimemedia.com

TIMBER SUPPLY, SPECIALIST TOOLS & COURSES



Woodturners - Joiners, - Cabinetmakers Call in and see our huge range at: Loseley Park, Guildford GU3 1HS

01483 457826 or 07795 663792 www.surreytimbers.co.uk



Critique of the book from Mr R A of Florida. "Without doubt, it is the most detailed and comprehensive Windsor chair construction book on the market today. Finding detailed instructions on this subject has been difficult. I have collected every book and article I could find. Your book beats them all; no contest."

www.makingwindsorchairs.co.uk Order through PayPal on the website, or please contact Peter by calling 0121705 2196 or Email: peterejudge@gmail.com or write to: Peter E Judge, 21 Somerby Drive, Solihull, West Midlands B91 3YY.

Delivery to Europe £15.00 plus £14.00 p&p - America £15.00 plus £22.50 p&p - Australia £15.00 plus £24.50 p&p - Canada £15.00 plus £22.50 p&p

Flexidisc Sander/Grinder

The Flexidisc sander gives a superb finish on wood, metal, fibreglass, car body filler and all hard materials.

Its fast rotation speed achieves sensational results in a fraction of the time normally taken by conventional sanders.

This versatile tool also sharpens chisels, plane blades, lathe tools, axes and garden tools without the rapid overheating of normal abrasive wheels. This is the ideal tool to prepare your timber prior to varnishing with Le Tonkinois varnish.

www.flexidiscsander.co.uk Tel: 01628 548840

Combining unrivalled protection on materials including cork flooring, stone, metal and wood and brilliant

permanent penetration, Le Tonkinois varnish leaves absolutely no brush marks and will restore the natural beauty of timber whilst removing your brush marks.

Flexible enough to move with the timber and able to withstand abrasion and impact, Le Tonkinois varnish is resistant to boiling water, UV, petrol, diesel and sea water. It won't crack, chip or peel off, making it perfect for all outside purposes as well as indoor.

www.letonkinoisvarnish.co.uk Tel: 01628 548840

Classifieds

To advertise in BRITAINS BIGGEST SELLING woodworking magazine call David Holden on 01689 869867 or email david.holden@mytimemedia.com

COURSES, WOOD FINISHES & SPECIALIST EQUIPMENT



www.metal-craft.co.uk



location in Hartland, North Devon. David's New DVD

www.davidcharlesworth.co.uk

High quality oil-wax finish - especially developed for

- > Extremely tough and hardwearing
- > Suitable for children's toys (EN 71.3)
- > Microporous, breathable finish, which
 - does not crack, peel, flake or blister

Call or visit website for stockists.

www.osmouk.com



Tool tuning and fine furniture

making courses

osmo

Woodworking

Classifieds

To advertise in BRITAINS BIGGEST SELLING woodworking magazine call David Holden on 01689 869867 or email david.holden@mytimemedia.com

SHOP & WEB GUIDES



GW300 on sale 4 December

Cuprinol









page

Celebrate with us as we bring you all the finalists from this year's Shed of the Year competition! 17 pages of weird, wonderful & wacky sheds for you to enjoy, plus an exclusive interview with founder and 'Head Sheddie' Andrew Wilcox

START FURNITURE MAKING

ALOON

John Bullar starts his 12-part series, which will guide you through setting up a workshop and choosing the right tools and materials, as well as studying in detail some of the most useful construction techniques

JAPANESE JOINERY MASTERCLASS

Japanese carpentry comes to Wiltshire as Michael Huntley reports from the first Japanese joinery masterclass held in the UK, organised by the Japanese Tool Group

TOP KIT ON TEST

Andy King puts the latest kit through its paces: ■ Albion Hobbies abrasives

- Bosch Wireless charging system
- DeWalt DCN660 2nd Fix Nailer
- Razor Shark strops

BAH HUMBUG!

Les Thorne gets festive and turns a selection of Christmas-themed decorations, all of which will make great gifts!

Michael's musings



To stab or not to stab? Michael Huntley has a dilemma on his hands when it comes to using stab cuts

An interesting dilemma has emerged recently. I watched a master carpenter demonstrate cutting a half-lap joint in tulipwood. The shoulders were cut in the normal way by hand with a cross-cut saw and the waste was then removed with a mallet and chisel until nearly to depth. He then proceeded to use what I call the 'stabbing' technique. The mallet was put aside and the large, wide chisel pushed across the surface quickly and repeatedly, until he reached the gauge line. As a furniture restorer, I regard this as an inaccurate technique, but I know the carpenter well, and I know that he has constructed many projects successfully and is a sought-after craftsman. This was the technique that he wanted his students to use. This set me thinking because I regularly tell my students NOT to use this technique!

Hands behind cutting edges

In a subsequent discussion with a colleague who teaches this method for timber framing, he told me that he likes the technique because

a) it is fast and b) it means that the students must hold the chisel with both hands. If their hands are on the tool, then the edge cannot cut them – "hands must always be behind cutting edges."

He says: "I regard stabbing as a useful technique and demonstrate it to my students and encourage them to try it. It is useful in working green oak down to the line. So far it has proved safe and effective. One reason being that both hands are behind the chisel's edge. Students occasionally have one hand pushing hard on the chisel and the other hand holding the work down in the general area in front of the chisel. This is potentially dangerous as, if the chisel were to suddenly slip forward, it could cut the other hand.

My thoughts are that this (stabbing) is a valid carpentry technique for all abilities. There is potential to dig in too far, but with wet oak tenons, a millimetre or two is not a problem on the tenon cheeks.

Bevel down paring is another technique I

use, but this tends to be for removing very thin slices, where there is a localised high spot."

Carpentry course stabbing

So we have here a couple of interesting observations. Firstly, any student must do what the teacher actually demonstrates in the class room, but it may take many hours for the student to achieve the dexterity and muscle memory of the teacher. While that is happening, accuracy may suffer. Secondly, in today's world of 'fast-track' specialised short courses, there is not time for the muscle memory to become ingrained and therefore chisel use needs to be slower and more targeted than repeated stabbing in order to produce accurate joints.

Carpentry course stabbing may well account for much disappointment when trying to teach yourself new skills. What you can learn with a tutor demonstrating in front of you is very different to what you can teach yourself in the workshop. I

Engineered Precision



Take the Grind out of Sharpening

Fitted with a pre-dressed, high-grade grindstone and leather honing wheel, the Triton Wetstone Sharpener produces a polished, razor-sharp edge on cutting and shaping tools.

Used in conjunction with the supplied honing compound, the leather honing wheel delivers a finely polished finish, ideal for hand tools, knives, plane irons, chisels and other wood carving tools.

Edges won't overheat or lose their sharpness due to the water-cooled, slow speed of the wetstone sharpener. Using the support arm, angle guide and jig, it is easy to shape and sharpen a blade precisely to the angle required.

Pre-dressed and ready for use, the high-grade diamond grindstone can be easily and quickly re-dressed with the provided stone grader. The 120W induction motor provides long-lasting, smooth performance and rubber feet keep the machine steady and minimise vibration for a perfect finish.





PT107 10" x 7" Heavy Duty Planer Thicknesser

The PT107 is perfectly suited to the discerning woodworker who expects professional and reliable performance from a solid, durable and compact machine. Whilst compact enough for smaller workshops and ideal for serious home or trade users, this machine boasts some impressive industrial features and is exceptionally smooth and accurate in operation.

If you are in the market for a good planer thicknesser then check this out at one of our display stockists to fully appreciate the value on offer.

Only

Save £100 off Spring / Summer Catalogue price

UEA GUARANTEE

"The PT107 is extremely well built, with heavy cast iron tables polished to a fine finish.

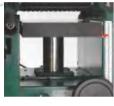
This machine feels more like a proper industrial model in use. The sheer weight minimises any vibration."

🟫 🏫 🏫 🏫 🏫 The Woodworker

"Top Quality - This is a very well made machine with full adjustment of both infeed and outfeed tables. This is unusual in a home workshop machine and allows very fine adjustment to eliminate any gouging at the end (snipe)...Results are excellent, chip clearance is good and the changeover from planing to thicknessing is quick and easy."

DesmondW, Online Review

Price valid until 28.02.2016. E&OE.



Central Column The thicknessing table is supported by a sturdy central column for superior stability and easy rise and fall adjustment.



Cutter Block The three knife cutterblock ensures an excellent finish.



Sturdy Fence System The fence can tilt up to 45° and is supported by a strong mounting system.

See the value the **PT107 offers** for yourself at the following stockists:

ENGLAND

Aldermaston Tool Company Young Hill, Aldermaston, Berkshire, RG7 4PW	
	s Ind Est, Paices 0118 981 1470
Grahams Machinery Deva House, Kr Chester, Cheshire, CH1 4NX	utsford Way, 01244 376 764
Westcountry Machinery 4 wood	
Beacon Kilns, High Street Village, St Austell, Cornwall, PL26 7SR	01726 828 388
Jaymac (Derby) Ltd 852 London Roa Derby, Derbyshire, DE24 8WA	id, 01332 755 799
Toolite Co Unit 3/2 The Mews Brook S	treet,
Mitcheldean, Gloucestershire, GL17 0SL	01594 544521
Tewkesbury Saw Co Ltd Newtown Tewkesbury, Gloucestershire, GL20 8JG	
John Davis Woodturning The Old St	ables,
Chilbolton Down Farm, Stockbridge, Hampshire, SO20 6BU	01264 811 070
D.B. Keighley Machinery Ltd Vicker Stanningley, Yorkshire, LS28 6LZ	s Place, 01132 574 736
J Carr & Son Ltd 9-10 Horncastle Roa Boston Lincolnshire, PE21 9BN	ad, 01205 351 555
D&M Tools 73-81 Heath Road, Twicke Middlesex, TW1 4AW	nham, 0208 892 3813
Norfolk Saw Services Dog Lane, Hor Norwich, Norfolk, NR10 3DH	rsford, 01603 898 695
Snainton Woodworking Supplies	
Barker Lane, Snainton, Scarborough,	
North Yorkshire, YO13 9BG	01723 859 545
Oxon Fastenings Systems Academic	c House,
Oakfield Ind Est, Stanton Harcourt Rd, E	
Oxfordshire, OX29 4AJ	01865 884 022
	••••••
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road,	tock,
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road,	tock, 01935 822 207 01782 416 102
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane	tock, 01935 822 207 01782 416 102 ³ 01284 754 132
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ	tock, 01935 822 207 01782 416 102 c, 01284 754 132 monton Road, 01473 623 381
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed	tock, 01935 822 207 01782 416 102 c, 01284 754 132 monton Road, 01473 623 381
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR	tock, 01935 822 207 01782 416 102 3, 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham,	tock, 01935 822 207 01782 416 102 3, 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 SRH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP	tock, 01935 822 207 01782 416 102 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000 g Estate,
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 SRH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster,	tock, 01935 822 207 01782 416 102 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000 g Estate, 01562 829 722
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge	tock, 01935 822 207 01782 416 102 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West,
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND	tock, 01935 822 207 01782 416 102 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West,
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies	tock, 01935 822 207 01782 416 102 a, 01284 754 132 monton Road, 01473 623 381 J Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND	tock, 01935 822 207 01782 416 102 a, 01284 754 132 monton Road, 01473 623 381 J Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Inverness, Inverness-shire, IV1 1SN Further branches available throughout the hig	tock, 01935 822 207 01782 416 102 , 01284 754 132 monton Road, 01473 623 381 , Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Inverness, Inverness-shire, IV1 1SN Further branches available throughout the hig Please contact for more details.	tock, 01935 822 207 01782 416 102 , 01284 754 132 monton Road, 01473 623 381 , Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Inverness, Inverness-shire, IV1 1SN Further branches available throughout the hig Please contact for more details. Brodies Timber The Old Sawmill,	tock, 01935 822 207 01782 416 102 , 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999 hlands.
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 SRH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Inverness, Inverness-shire, IV1 15N Further branches available throughout the hig Please contact for more details. Brodies Timber The Old Sawmill, Inver, Dunkeld, Perthshire, PH8 0JR	tock, 01935 822 207 01782 416 102 , 01284 754 132 monton Road, 01473 623 381 , Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Inverness, Inverness-shire, IV1 1SN Further branches available throughout the hig Please contact for more details. Brodies Timber The Old Sawmill,	tock, 01935 822 207 01782 416 102 , 01284 754 132 monton Road, 01473 623 381 Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999 hlands.
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 SRH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking I Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Inverness, Inverness-shire, IV1 15N Further branches available throughout the hig Please contact for more details. Brodies Timber The Old Sawmill, Inver, Dunkeld, Perthshire, PH8 0JR IRELAND WH Raitt & Son Ltd Main Street, Stranorlar, County Donegal 003	tock, 01935 822 207 01782 416 102 2, 01284 754 132 monton Road, 01473 623 381 1 Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999 hlands. 01350 727 723 853 74 913 1028
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 SRH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Inverness, Inverness-shire, IV11 SN Further branches available throughout the hip Please contact for more details. Brodies Timber The Old Sawmill, Inver, Dunkeld, Perthshire, PH8 0JR IRELAND WH Raitt & Son Ltd Main Street, Stranorlar, County Donegal 003	tock, 01935 822 207 01782 416 102 2, 01284 754 132 monton Road, 01473 623 381 1 Machinery Ltd 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999 hlands. 01350 727 723 853 74 913 1028
Oxfordshire, OX29 4AJ Yandle & Sons Ltd Hurst Works, Mar Somerset, TA12 6JU Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH DJ Evans (Bury) Ltd St Botolphs Lane Bury St Edmunds, Suffolk, IP33 2AU Elmers Hardware Ipswich 59-61 Ed Kesgrave, Ipswich, Suffolk, IP5 1EQ Scott and Sargeant Woodworking 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR RS Paskin & Co Ltd Oldington Tradin Stourport Road, Kidderminster, Worcestershire, DY11 7QP WALES Data Powertools Ltd 427 Cowbridge Cardiff, CF5 5TF SCOTLAND MacGregor Industrial Supplies 15-17 Henderson Road, Longman Indus Invernes, Inverness-shire, IV1 15N Further branches available throughout the hig Please contact for more details. Brodies Timber The Old Sawmill, Inver, Dunkeld, Perthshire, PH8 0JR IRELAND WH Raitt & Son Ltd Main Street, Stranorlar, County Donegal 003 Joe McKenna Ltd 54-56 Parnell Street Limerick, County Limerick 004 JJ Ronayne Ltd Dublin Road,Thurles	tock, 01935 822 207 01782 416 102 a, 01284 754 132 monton Road, 01473 623 381 J Machinery Ltdl 01403 273000 g Estate, 01562 829 722 e Rd West, 0292 0595 710 trial Estate, 01463 717 999 hlands. 01350 727 723 353 74 913 1028 t



www.recordpower.co.uk Tel: 01246 571 020



Incorporating some or use Most Tamous Drands in woodworking. Record Power have been manufacturing fine tools & machinery for over 100 years. Built to last we provide support for thousands of machines well over 50 years old, which are still in daily use. Testimony to the sound engineering principles and service support that comes with a Record Power product.